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IC System Solutions with High-Performance FRAM Memory

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2003 Summary Annual Report

Notice of 2004 Annual Meeting and Proxy Statement

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2003 Letter to Stockholders

To our Stockholders

In 2003, we made strides in transforming Ramtron into a market-driven company while positioning the company for long-term profitability and growth. These strides included a realignment of the company's core business units, a fundamental shift in our FRAM product development and marketing strategy, and ongoing measures to control costs and expenses. As a result, I am pleased to report that Ramtron is stronger today and is poised to capitalize on the market opportunity enabled by its unique FRAM products.

New Directions

The realignment of our FRAM and Enhanced Memory Systems business units improved our operational efficiency and allowed us to concentrate on growing our profitable FRAM product business. In tandem with the realignment, we implemented a major shift in our FRAM product development and marketing strategy to emphasize more highly integrated analog and mixed signal products in addition to our stand-alone memory line. We also implemented an intense target market focus to drive the adoption of our products.

Ramtron's roots are firmly embedded in semiconductor memory, and we will continue to expand our line of stand alone FRAM memory products for select markets. The company is currently developing megabit-class FRAM memory products that we expect to further expand revenue opportunities and serve as memory platforms for our emerging analog and mixed-signal product line.

To leverage our development investment in stand alone memory products and grow the opportunity base for FRAM products, Ramtron has expanded its product development strategy to address the diverse analog and mixed-signal integrated circuit (IC) market. Our new system solutions, known as Processor Companions, are designed to streamline system design and enhance the functionality of the microprocessors used in them. Entering the analog and mixed-signal arena represents an exciting opportunity for Ramtron, as the market is characterized by a vast potential customer base that uses a broad range of products. Due to the more specialized nature of analog and mixed-signal ICs, product life cycles are longer, margins are more robust, and deeper customer engagements typically follow.

Adding selective analog and mixed-signal functions on-chip with our feature-rich nonvolatile FRAM memory enables a new class of products that cannot be matched using older nonvolatile memory technologies. Among these new products is our 31X processor companion product family. The 31X represents one of Ramtron's most exciting FRAM product introductions to date and has been received by potential customers with enthusiasm. We plan to introduce new varieties of the Processor Companion in the near future to further strengthen our market position.

FRAM Target Markets and 2003 Highlights

FRAM products serve a vast number of applications in the metering, automotive, computing, industrial, scientific and medical, and consumer markets. As electronic systems become more complex and require more innovative approaches to storing data, Ramtron is responding with an expanding line of products that leverage FRAM's unique feature set. Opportunities are growing in all of our markets, which is fueling our optimism about the business climate and bolstering our confidence for further improvement in sales performance.

During 2003, sales of our family of serial and parallel FRAM memory products grew in all geographic markets. Compared with full-year 2002, Asia/Pacific posted more than 85% growth in 2003, and 2004 looks promising in light of increasing activity in China and Taiwan. Active opportunities in Asia include RAID and server systems, handheld test instruments, car entertainment, vehicle locators, consumer, and telecommunications equipment. Many of these applications are in production today and represent growing opportunities in 2004.

Excluding revenue from our major metering customer, Enel, our FRAM sales in Europe grew by more than 90% over 2002. Metering remains a strong application for 2004, and it is evident that FRAM is becoming a standard in advanced metering systems worldwide. Other application opportunities expected to bear fruit in 2004 include tachometers, industrial controls, road toll systems, printers and copiers, airbag controllers, and industrial automation.

FRAM sales in Japan grew 110% in 2003, as we saw new opportunities in the computing segment and several long-standing designs move into production. Major multi-function printer and copier companies are using FRAM today. Other major Japan opportunities for 2004 include power meters, ATM machines, airbags, gaming machines, car audio, and pro camcorders. We are also seeing increasing opportunities for FRAM in the rapidly growing liquid crystal display (LCD) and plasma screen television market, as well as growing interest in automobile navigation systems.

New applications and programs are emerging in North America. Specific applications include additional utility meters, airbags, motor controls, printer cartridges, RAID systems, electronic counters, and medical imaging systems. We anticipate sales in the distribution channel to be strong in 2004, further boosting our performance in North America.

Conclusion

It is clear that the fundamental changes we made in 2003 have begun to have a positive effect on the company's financial performance, as we made incremental bottom-line progress throughout the year leading to a fourth-quarter 2003 profit and an improved balance sheet. We look forward to the challenge of continuing our path toward sustainable profitability. Posting a fourth-quarter 2003 profit was the first step toward realizing this goal, and the outlook for continuing this trend is positive.

Sincerely,

William W. Staunton, III Chief Executive Officer

March 31, 2004



RAMTRON INTERNATIONAL CORPORATION NOTICE OF ANNUAL MEETING OF STOCKHOLDERS June 3, 2004

NOTICE IS HEREBY GIVEN that the Annual Meeting of the Stockholders (the Annual Meeting) of Ramtron International Corporation, a Delaware corporation (the Company), will be held on June 3, 2004, at 10:30 a.m., Mountain Time, at the Hilton Garden Inn, 1810 Briargate Parkway, Colorado Springs, Colorado 80920, for the following purposes, each as more fully described in the attached Proxy Statement:

- 1. To elect seven directors. The names of the nominees intended to be presented for election are: Albert J. Hugo-Martinez, William W. Staunton, III, Greg B. Jones, William G. Howard, Eric A. Balzer, Klaus Fleischmann, and Doris Keitel-Schulz.
- 2. To ratify the appointment of KPMG LLP as independent auditors of the Company for the fiscal year ending December 31, 2004.
- 3. To transact other business as may properly come before the Annual Meeting or any adjournment(s) thereof.

Only record holders of the Company's Common Stock at the close of business on April 5, 2004, are entitled to notice of, and to vote at, the Annual Meeting and at any adjournment(s) thereof.

All stockholders are cordially invited to attend the Annual Meeting in person. Whether you own a few or many shares of stock and whether or not you expect to attend the Annual Meeting in person, it is important that your shares be voted to ensure your representation and the presence of a quorum at the annual meeting. Most beneficial stockholders who own shares through a bank or broker may vote by telephone or the Internet as well as by mail. Registered stockholders who own their shares in their own name must vote by mail. If you vote by mail, please complete, sign, date and return the accompanying proxy card in the enclosed envelope. If you decide to attend the annual meeting and wish to change your proxy vote, you may do so by voting in person at the annual meeting. Your proxy may be revoked at any time prior to the annual meeting in accordance with the procedures set forth in the Proxy Statement.

By Order of the Board of Directors

Lulian D. Harson

LuAnn D. Hanson

Secretary

Colorado Springs, Colorado April 6, 2004

Ploxy Statement

RAMTRON INTERNATIONAL CORPORATION PROXY STATEMENT INFORMATION CONCERNING SOLICITATION AND VOTING

The enclosed proxy is solicited by and on behalf of the Board of Directors of Ramtron International Corporation, a Delaware corporation (Ramtron or the Company), for use at the Annual Meeting of Stockholders (the Annual Meeting) to be held on Thursday, June 3, 2004, at 10:30 a.m., Mountain Time, or at any adjournment(s) thereof, for the purposes set forth herein and in the accompanying Notice of Annual Meeting of Stockholders. The Annual Meeting will be held at the Hilton Garden Inn, 1810 Briargate Parkway, Colorado Springs, Colorado 80920.

The Company's principal place of business is 1850 Ramtron Drive, Colorado Springs, Colorado 80921.

The proxy statement and accompanying proxy are first being mailed to the Company's shareholders on or about April 15, 2004.

VOTING AND PROXIES

What is the purpose of the Annual Meeting?

At the Annual Meeting, shareholders will be asked to act upon the matters outlined in the notice of meeting on the cover page and described in this proxy statement, including the election of directors and ratification of the appointment of our independent auditors for the fiscal year ending December 31, 2004. In addition, management will respond to questions from shareholders.

Who is entitled to vote?

Only holders of record of shares of the Company's Common Stock at the close of business on April 5, 2004 (the Record Date) are entitled to vote at the Annual Meeting. If you were a shareholder of record on that date, you will be entitled to vote all of the shares that you held on that date at the meeting, or any postponements or adjournments of the meeting. 22,196,264 shares of Common Stock were issued and outstanding as of the close of business on the Record Date.

What are the voting rights of the holders of the Company's Common Stock?

Each outstanding share of the Company's Common Stock will be entitled to one vote on each matter.

How can I vote my shares without attending the Annual Meeting?

Whether you hold shares directly as the shareholder of record or beneficially in street name, you may direct how your shares are voted without attending the Annual Meeting. If you are a shareholder of record, you may vote by submitting a proxy. If you hold shares beneficially in street name, you may vote by submitting voting instructions to your broker, trustee or nominee. For directions on how to vote, please refer to the instructions below and those included on your proxy card or, for shares held beneficially in street name, the voting instruction card provided by your broker, trustee or nominee.

Shareholders of record of Common Stock may submit proxies by completing, signing and dating their proxy cards and mailing them in the accompanying pre-addressed envelope. Shareholders who hold shares beneficially in street name may vote by mail by completing, signing, and dating the voting instruction cards provided and mailing them in the accompanying pre-addressed envelopes.

Can I change my vote after I return my proxy card?

Yes. Even after you have submitted your proxy, you may revoke or change your vote at any time before the proxy is exercised by filing with the Corporate Secretary of the Company either a notice of revocation or a duly executed proxy bearing a later date. The powers of the proxy holders will be suspended if you attend the meeting in person and so request, although attendance at the meeting will not by itself revoke a previously granted proxy.

Is my vote confidential?

Proxy instructions, ballots and voting tabulations that identify individual shareholders are handled in a manner that protects your voting privacy. Your vote will not be disclosed either within the Company or to third parties, except: (1) as necessary to meet applicable legal requirements, (2) to allow for the tabulation of votes and certification of the vote, and (3) to facilitate a successful proxy solicitation. Occasionally, shareholders provide written comments on their proxy card, which are then forwarded to management of the Company.

How are votes counted?

In the election of directors, you may vote "FOR" all of the nominees or your vote may be "WITHHELD" with respect to one or more of the nominees.

For the other items of business, you may vote "FOR," "AGAINST" or "ABSTAIN." If you "ABSTAIN," the abstention has the same effect as a vote "AGAINST." If you provide specific instructions with regard to certain items, your shares will be voted as you instruct on such items. If you sign your proxy card or voting instruction card without giving specific instructions, your shares will be voted in accordance with the recommendations of the Board ("FOR" all of the nominees to the Board, "FOR" ratification of the independent auditors).

What is the voting requirement to approve each of the proposals?

In the election of directors, the seven persons receiving the highest number of "FOR" votes cast in their favor at the Annual Meeting will be elected. All other proposals require the affirmative "FOR" vote of a majority of those shares present in person or represented by proxy and entitled to vote on those proposals at the Annual Meeting. If you hold shares beneficially in street name and do not provide your broker with voting instructions, your shares may constitute "broker non-votes." Generally, broker non-votes occur on a matter when a broker is not permitted to vote on that matter without instructions from the beneficial owner and instructions are not given. In tabulating the voting result for any particular proposal, shares that constitute broker non-votes are not considered entitled to vote on that proposal. Thus, broker non-votes will not affect the outcome of any matter being voted on at the Annual Meeting, assuming that a quorum is obtained. Abstentions have the same effect as votes against the matter.

What constitutes a quorum?

The presence at the Annual Meeting, in person or by proxy, of the holders of a majority in the aggregate voting power of the outstanding shares of Common Stock entitled to vote will constitute a quorum, permitting the meeting to conduct its business. As of the Record Date, 22,196,264 shares of Common Stock, representing the same number of votes, were outstanding. Thus, the presence of the holders of Common Stock representing at least 11,098,133 votes will be required to establish a quorum. Proxies received but marked as abstentions and broker non-votes will be included in the calculation of the number of shares considered to be present at the Annual Meeting.

What happens if additional matters are presented at the Annual Meeting?

Other than the two items of business described in this proxy statement, we are not aware of any other business to be acted upon at the Annual Meeting. If you grant a proxy, the persons named as proxy-holders, Greg B. Jones and William W. Staunton, will have the discretion to vote your shares on any additional matters properly presented for a vote at the Annual Meeting. If for any unforeseen reason any of our nominees is not available as a candidate for director, the persons named as proxy holders will vote your proxy for such other candidate or candidates as may be nominated by the Board.

What should I do if I receive more than one set of voting materials?

You may receive more than one set of voting materials, including multiple copies of this proxy statement and multiple proxy cards or voting instruction cards. For example, if you hold your shares in more than one brokerage account, you may receive a separate voting instruction card for each brokerage account in which you hold shares. If you are a shareholder of record and your shares are registered in more than one name, you will receive more than one proxy card. Please complete, sign, date and return each proxy card and voting instruction card that you receive.

Who will bear the cost of soliciting votes for the Annual Meeting?

The Company is making this solicitation and will pay the entire cost of preparing, assembling, printing, mailing and distributing these proxy materials and soliciting votes. If you choose to access the proxy materials over the Internet, you are responsible for Internet access charges you may incur. In addition to the mailing of these proxy materials, the solicitation of proxies or votes may be made in person, by telephone or by electronic communication by our directors, officers and employees, who will not receive any additional compensation for such solicitation activities. Upon request, we will also reimburse brokerage houses and other custodians, nominees and fiduciaries for forwarding proxy and solicitation materials to shareholders.

Where can I find the voting results of the Annual Meeting?

We intend to announce preliminary voting results at the Annual Meeting and publish final results in our quarterly report on Form 10-Q for the guarter ending June 30, 2004.

What is the difference between holding my shares as a shareholder of record and as a beneficial owner?

Most shareholders hold their shares through a broker or other nominee rather than directly in their own name. As summarized below, there are some distinctions between shares held of record and those owned beneficially.

- Shareholder of Record If your shares are registered directly in your name with the Company's transfer agent, Citibank, N.A., you are considered, with respect to those shares, the shareholder of record, and these proxy materials are being sent directly to you by the Company. As the shareholder of record, you have the right to grant your voting proxy directly to the Company or to vote in person at the meeting. The Company has enclosed or sent a proxy card for you to use.
- Beneficial Owner If your shares are held in a brokerage account or by another nominee, you are considered the beneficial owner of shares held in street name, and these proxy materials are being forwarded to you together with a voting instruction card. As the beneficial owner, you have the right to direct your broker, trustee, or nominee how to vote and are also invited to attend the annual meeting. Since a beneficial owner is not the shareholder of record, you may not vote these in person at the meeting unless you obtain a "legal proxy" from the broker, trustee, or nominee that holds your shares, giving you the right to vote the shares at the meeting. Your broker, trustee, or nominee has enclosed or provided voting instructions for you to use in directing the broker, trustee, or nominee how to vote your shares.

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How will my proxy be voted?

Your proxy, when properly signed and returned to us, and not revoked, will be voted in accordance with your instructions relating to the election of directors and on Proposal 2. We are not aware of any other matter that may be properly presented other than the election of directors and Proposal 2. If any other matter is properly presented, the persons named in the enclosed form of proxy will have discretion to vote in their best judgment. If your shares are held in the name of a bank, broker or other nominee, you must obtain a proxy, executed in your favor, from the holder of record, to be able to vote at the Annual Meeting.

What if I don't mark the boxes on my proxy?

Unless you give other instructions on your form of proxy, the persons named as proxies will vote in accordance with the recommendations of the Board of Directors. The Board's recommendation is set forth together with the description of each Proposal in this Proxy Statement. In summary, the Board recommends a vote FOR:

- The election of Albert J. Hugo-Martinez, William W. Staunton, III, Greg B. Jones, William G. Howard, Eric A. Balzer, Klaus Fleischmann, and Doris Keitel-Schulz as directors.
- The ratification of the appointment of KPMG LLP as our independent auditors for the fiscal year ending December 31, 2004.

Can I go to the Annual Meeting if I vote by proxy?

Yes. Attending the Annual Meeting does not revoke the proxy. However, you may revoke your proxy at any time before it is actually voted by giving written notice to the secretary of the Annual Meeting or by delivering a later dated proxy.

Will my vote be public?

No. As a matter of policy, shareholder proxies, ballots and tabulations that identify individual shareholders are kept confidential and are only available as actually necessary to meet legal requirements.

SHAREHOLDERS OF THE COMPANY ARE REQUESTED TO COMPLETE, SIGN, DATE, AND PROMPTLY RETURN THE ACCOMPANYING PROXY CARD IN THE ENCLOSED POSTAGE-PREPAID ENVELOPE. SHARES OF COMMON STOCK REPRESENTED BY A PROPERLY EXECUTED PROXY RECEIVED PRIOR TO THE VOTE AT THE ANNUAL MEETING AND NOT REVOKED WILL BE VOTED AT THE ANNUAL MEETING AS DIRECTED BY THE PROXY. IT IS NOT ANTICIPATED THAT ANY MATTERS OTHER THAN THOSE SET FORTH IN THE PROXY STATEMENT WILL BE PRESENTED AT THE ANNUAL MEETING. IF OTHER MATTERS ARE PRESENTED, PROXIES WILL BE VOTED IN ACCORDANCE WITH THE DISCRETION OF THE PROXY HOLDERS.

Deadline for Receipt of Stockholder Proposals

Proposals of stockholders of the Company, which are intended to be presented by such stockholders at the next annual meeting of stockholders of the Company to be held after the 2004 Annual Meeting must be received by the Company not later than December 15, 2004, in order that they may be included in the proxy statement and form of proxy relating to the 2005 annual meeting. It is recommended that stockholders submitting proposals direct them to the Secretary of the Company by certified mail, return receipt requested, in order to ensure timely delivery. No such proposals were received with respect to the Annual Meeting scheduled for June 3, 2004.

PROPOSAL 1 - ELECTION OF DIRECTORS

Nominees

A board of seven directors will be elected at the Annual Meeting. Unless otherwise instructed, proxy holders will vote the proxies received by them for the seven nominees named below, all of whom are currently directors of the Company. It is not expected that any nominee will be unable or will decline to serve as a director. If, however, any nominee of the Company is unable or declines to serve as a director at the time of the Annual Meeting, the proxies will be voted for any nominee who shall be designated by the present Board of Directors to fill the vacancy. In the event additional persons are nominated for election as directors, the proxy holders intend to vote all proxies received by them for the nominees listed below and not for a greater number of persons than the number of nominees listed below. The term of office of each person elected as a director at the Annual Meeting will continue until the next annual meeting of stockholders and such time as his successor is duly elected and qualified or until his earlier resignation, removal or death.

The names of the nominees, who constitute all of the current directors, and certain information about them, are set forth below:

Name	Age	Position(s) with the Company			
Albert J. Hugo-Martinez(1)(2)	58	Director and Chairman			
William W. Staunton, III	56	Director and Chief Executive Officer			
Greg B. Jones	56	Director and President-Technology Group			
William G. Howard(1)(2)	62	Director			
Eric A. Balzer(1)(2)	55	Director			
Klaus Fleischmann	40	Director			
Doris Keitel-Schulz	45	Director			

- (1) Member of the Compensation Committee.
- (2) Member of the Audit Committee.

Mr. Hugo-Martinez has served as a director of the Company since March 1999 and became Chairman of the Board of Directors in February 2003. From March 1996 to November 1998, he served as President and Chief Executive Officer and a member of the Board of Directors of GTI Corporation, a manufacturer of ISDN and local area network subcomponents. From 1987 to 1995, he served as President and Chief Executive Officer of Applied Micro Circuits Corporation, a manufacturer of high-performance bipolar and biCMOS gate arrays. Mr. Hugo-Martinez is also a Director of Microchip, Inc., a public semiconductor manufacturing company specializing in micro-controller devices.

Mr. Staunton joined the Company as a director and the Company's Chief Executive Officer in December 2000. Prior to joining the Company, Mr. Staunton served as Chief Operating Officer of Maxwell Technologies, a company which designs and manufactures multi-chip modules and board products for commercial satellite applications, from March 1999 until December 2000. Mr. Staunton was Executive Vice President of Valor Electronics Inc. from April 1996 until April 1999. Valor Electronics designs and manufactures magnetic filter products for use in local area networks and communications products. His experience also includes serving as Vice President at Applied Micro Circuits Corporation from December 1987 until March 1996. Mr. Staunton holds a Bachelors of Science degree in Electrical Engineering from Utah State University.

Mr. Jones is currently a director and the Company's President - Technology Group. He joined the Company in January 1995, as Ramtron's Chief of Administration. In February 1995, Mr. Jones became a director and the Company's President and Chief Operating Officer. Prior to joining Ramtron, Mr. Jones was Marketing Director at Concord Services, Inc. from November 1993 until January 1995. From August 1990 until November 1993, Mr. Jones served as Director of Vertical Reactors at ASM America, Inc. Prior to his work with ASM America, Inc., Mr. Jones held a variety of management positions in sales, marketing, corporate planning and project management. He holds a Bachelor of Science degree in Engineering from the U.S. Naval Academy, Annapolis and a Master of Science degree in Management Sciences from Stanford University.

Dr. Howard has served as a director of the Company since July 1994. Since September 1990, Dr. Howard has been an independent engineering consultant to various entities, including SEMATECH, the Semiconductor Industry Association and Dow Corning. From October 1987 until December 1990, he served as a Senior Fellow at the National Academy of Engineering while on leave from Motorola. From 1969 to 1990, Dr. Howard was employed by Motorola where he most recently served as Corporate Senior Vice President and Director of Research and Development. Dr. Howard is a member of the National Academy of Engineering and a fellow of the Institute of Electrical Engineers and of the American Association for the Advancement of Science. Dr. Howard is Chairman of Thunderbird Technologies, a private company developing new transistor technologies and is a Director of Credence Systems, Inc., a public company that manufactures electronic test equipment; BEI Technologies, Inc., a public company that manufactures integrated circuits and Innovative Micro Technology, a micro-electromechanical manufacturing company.

Mr. Balzer has served as a director of the Company since September 1998. From January 1990 until his retirement in November 1999, Mr. Balzer served as Senior Vice President of Operations for Advanced Energy Industries, Inc. a company that develops, manufactures and markets power conversion devices for the semiconductor equipment industry. Prior to his employment with Advanced Energy Industries, Inc., Mr. Balzer served as Materials and Manufacturing Manager for IBM's corporate systems technology division. Mr. Balzer is also a director of All America Real Estate Development, a public company, involved in real estate development.

Mr. Fleischmann has served as a director of the Company since May 2001. Mr. Fleischmann currently serves as the Vice President of Business Development for Infineon Technology AG. From July 2000 to October 2003, he served as Senior Director of Business Development and Relations for Infineon Technologies' Memory Products Division. Holding various positions with Siemens AG, the parent company of Infineon, Mr. Fleischmann has over 18 years of business and financial management experience including positions as financial controller for wafer fabrication and semiconductor assembly and testing facilities. In 1997, Mr. Fleischmann was named Director of Business Administration Products, Projects and Research and Development for Siemens' Memory Products Division. From 1999 to 2000, Mr. Fleischmann held the position of Director of Business Administration Products, Projects and Research and Development for Infineon's Memory Products Division.

Ms. Doris Keitel-Schulz has served as a director of the Company since October 2003. In 1999, Ms. Keitel-Schulz was named Director of Special Projects within the Memory Products Group of Infineon Technologies AG (formerly Siemens Semiconductor). Ms. Doris Keitel-Schulz is a 20-year veteran in the development, manufacture and application of semi-conductor components. From 1987, she held various engineering management positions in CAD, design methodology, memory, and logic design with Siemens Semiconductor Group. Ms. Keitel-Schulz holds a Masters degree in Material Science and Electronics from the University of Erlangen-Nueremberg.

THE BOARD OF DIRECTORS RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE ELECTION OF EACH OF THE NOMINEES NAMED ABOVE.

INFORMATION REGARDING THE BOARD OF DIRECTORS AND ITS COMMITTEES

The Board of Directors currently consists of seven directors. The Board of Directors held a total of six meetings during 2003. Each Director attended at least 75% of the aggregate of (a) the total number of meetings of the Board of Directors held during the period for which he/she has been a director and (b) the total number of meetings held by all committees of the Board of Directors on which he/she served during the period. While the Company does not have a formal policy regarding the attendance of directors at the Annual Meeting of Stockholders, all directors are urged to attend. All but three of the Board of Directors attended last year's Annual Meeting of Stockholders. In addition to the foregoing, the Company's directors discharge their responsibilities throughout the year through personal meetings and other communications, including considerable telephone contact with each other and the executive officers regarding the interest and concerns of the Company.

The Board of Directors consists of a majority of "independent directors" as such term is defined in The Nasdaq Stock Market Marketplace Rules. The Board of Directors has determined that Mr. Albert J. Hugo-Martinez, Mr. Eric A. Balzer, Dr. William G. Howard, Mr. Klaus Fleischmann and Ms. Doris Keitel-Schulz are independent directors.

Any shareholder may communicate with members of the Board of Directors by mail addressed to an individual member of the Board, to the full Board, or to a particular committee of the Board, at the following address: c/o Ramtron International Corporation, Attn: Chairman of the Board, 1850 Ramtron Drive, Colorado Springs, Colorado 80921. This information is also available on the Company's website at www.ramtron.com.

The two standing committees of the Board are the Compensation Committee and the Audit Committee. The Board has appointed only independent directors to the Audit and Compensation Committees.

<u>Compensation Committee.</u> The members of the Compensation Committee are Dr. Howard, Mr. Hugo-Martinez and Mr. Balzer. There were two meetings of the Compensation Committee during 2003. This committee makes recommendations to the Board of Directors regarding salaries, bonuses, stock option grants and other compensation and benefits for directors, officers and employees.

Audit Committee. The members of the Audit Committee are Dr. Howard, Mr. Hugo-Martinez and Mr. Balzer. There were four meetings of the Audit Committee during 2003. The Audit Committee is responsible for policies, procedures and other matters relating to accounting, internal financial controls and financial reporting, including the engagement of independent auditors and the planning, scope, timing and cost of any audit and any other services that the auditors may be asked to perform, and review with the auditors their report on the Company's financial statements following the completion of each audit. Each Audit Committee member is considered "independent" as such term is defined in The Nasdaq Stock Market Marketplace Rules and Securities and Exchange Commission (SEC) regulations. The Board of Directors has determined that based on the credentials of Mr. Eric Balzer, the Chairman of the Audit Committee, Mr. Balzer qualifies as an "audit committee financial expert" within the meaning of SEC regulations.

The Audit Committee has adopted a written charter for the Audit Committee, a copy of which is attached to this proxy statement as Appendix A.

Nominating Committee. The Board of Directors has not appointed a nominating committee. The Board of Directors believes that it is appropriate for the Company not to have a nominating committee on the basis that the entire Board, the majority of which are independent directors, can and does perform the functions of a nominating committee. The Board of Directors has not considered or adopted a nominating committee charter. The Board of Directors does not have a formal policy with regard to the consideration of any director candidates recommended by security holders. The Board of Directors has considered and will consider on an ad hoc basis any candidates recommended by security holders. The Board of Directors expects to continue its present policy of considering candidates recommended by security holders although the Board of Directors has not adopted any formal procedures to be followed by security holders in submitting such recommendations, nor has the Board of Directors established any specific, minimum qualifications that the Board of Directors believes must be met by a nominee recommended by security holders for a position on the Company's Board of Directors. The Board of Directors believes that, in view of the size of the Board and the independence of a majority of the Directors, it is appropriate for the Board not to have a formal policy with regard to the consideration of any director candidates recommended by security holders.

Compensation of Directors. Directors, other than the Chairman of the Board of Directors, who are not officers of the Company, are paid monthly fees of \$1,000, plus \$1,500 for each Board of Directors meeting attended in person. The Chairman of the Board of Directors is paid monthly fees of \$4,583. The Chairman of the Audit Committee is paid \$2,000 for each Audit Committee meeting. Directors are also reimbursed for reasonable expenses for attending Board of Directors' meetings. Non-employee directors of the Company are eligible to be granted non-statutory stock options under the Company's 1995 Stock Option Plan.

Providencem.

The following table sets forth Common Stock options granted to current non-employee directors of the Company from January 2003 through February 2004. Such options were granted at the fair market value of the Company's Common Stock of the date of such grants. These options were granted in recognition of the services the named individuals performed as directors of the Company.

Name	Option Grant Date	Number of Securities Underlying Options Granted
Albert J. Hugo-Martinez	February 2003	25,000(1)
	October 2003	50,000
William G. Howard	October 2003	25,000
Eric A. Balzer	October 2003	25,000
Klaus Fleischmann	October 2003	25,000
Doris Keitel-Schulz	October 2003	25,000

⁽¹⁾ This option was granted in consideration of Mr. Hugo-Martinez's election to Chairman of the Board.

EXECUTIVE OFFICERS OF THE REGISTRANT

The executive officers of the Company, and certain information about them, are as follows:

Name	Age	Position(s)
William W. Staunton, III	56	Director and Chief Executive Officer
Greg B. Jones	56	Director and President, Technology Group
LuAnn D. Hanson	44	Chief Financial Officer, Vice President of Finance and Corporate Secretary

Officers are appointed by and serve at the discretion of the Board of Directors. For information concerning Mr. Staunton and Mr. Jones, see "Nominees" above.

In February 2000, Ms. Hanson was named Chief Financial Officer and Vice President of Finance. Ms. Hanson joined the Company in September 1993 as Assistant Controller. In April 1995, she was named Controller and served in that capacity until January 1999 when she was named Vice President of Finance and Corporate Controller. Before joining the Company, Ms. Hanson held various positions at Carniero, Chumney & Co., certified public accountants, and various positions in accounting with United Technologies Microelectronics Center. Ms. Hanson is a certified public accountant and attended the University of Northern Iowa earning a Bachelor of Arts degree in Accounting and a Master of Business Administration degree in Finance and Accounting from Regis University.

SECURITY OWNERSHIP OF PRINCIPAL STOCKHOLDERS AND MANAGEMENT

The following table sets forth certain information regarding beneficial ownership of the Company's Common Stock as of March 31, 2004 by: (i) each person who is known by the Company to own beneficially more than 5% of the outstanding shares of the Company's Common Stock; (ii) each of the Company's directors; (iii) each of the Company's executive officers; and (iv) all current directors and executive officers of the Company as a group.

Name of Beneficial Owner(1)	Shares of Common Stock Beneficially Owned	Percent of Class ⁽²⁾		
Infineon Technologies, AG St. Martin Strasse 53 Munich, D-81541 Germany	5,488,635(3)	23.6%		
National Electrical Benefit Fund 1125 15th Street, N.W., Room 912 Washington, D.C. 20005	2,555,377(4)	11.1		
Greg B. Jones	367,350(5)	1.6		
William W. Staunton, III	262,500(6)	1.2		
LuAnn D. Hanson	167,498(7)	*		
Albert J. Hugo-Martinez	166,600 ⁽⁸⁾	*		
William G. Howard	118,000 ⁽⁹⁾	*		
Eric A. Balzer	114,000(10)	*		
Klaus Fleischmann	77,500(11)	*		
Doris Keitel-Schulz	45,000(12)	*		
All current directors and executive officers as a group (8 persons)	1,318,448(13)	5.6		

Less than one percent

- (1) Such persons have sole voting and investment power with respect to all shares of Common Stock shown as being beneficially owned by them, subject to community property laws where applicable, except as otherwise indicated in the information contained in these footnotes.
- (2) Pursuant to Rule 13d-3(d)(1)(B) of the Securities Exchange Act of 1934, as amended (the Exchange Act), shares of Common Stock issuable upon the exercise of warrants or stock options held by each person set forth in the table which are currently or become exercisable within 60 days of March 30, 2004 are included in the number of shares of Common Stock outstanding for purposes of determining the percentage ownership of such person.
- (3) Includes: (i) 4,430,005 shares of Common Stock issued to Infineon Technologies, AG, pursuant to a Stock Purchase Agreement between the Company and Infineon Technologies, AG; (ii) 795,967 shares of Common Stock issuable to Infineon pursuant to the provisions of a \$3,000,000 convertible Debenture; and (iii) 262,663 shares of Common Stock issuable upon exercise of warrants held by Infineon.
- (4) Includes: (i) 1,638,680 shares of Common Stock owned by the National Electrical Benefit Fund (the Fund); (ii) 905,697 shares of Common Stock issuable upon exercise of warrants held by the Fund; and (iii) 11,000 shares of Common Stock issuable upon exercise of options held by the Fund. The trustees of the Fund share voting and dispositive powers as to such shares.
- (5) Includes: (i) 2,600 shares of Common Stock owned directly; and (ii) 364,750 shares issuable to Mr. Jones upon exercise of options.
- (6) Includes 262,500 shares issuable to Mr. Staunton upon exercise of options.

- (7) Includes: (i) 100 shares of Common Stock owned directly; and (ii) 167,398 shares issuable to Ms. Hanson upon exercise of options.
- (8) Includes: (i) 2,600 shares of Common Stock owned directly; and (ii) 164,000 shares issuable to Mr. Hugo-Martinez upon exercise of options.
- (9) Includes 118,000 shares issuable to Dr. Howard upon exercise of options.
- (10) Includes 114,000 shares of Common Stock issuable to Mr. Balzer upon exercise of options.
- (11) Includes: (i) 500 shares of Common Stock owned directly; and (ii) 77,000 shares of Common Stock issuable to Mr. Fleischmann upon exercise of options.
- (12) Includes 45,000 shares of Common Stock issuable to Ms. Keitel-Schulz upon exercise of options.
- (13) Includes 1,312,648 shares of Common Stock issuable to current officers and directors upon exercise of options.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Under Section 16(a) of the Exchange Act, the Company's directors and officers and persons holding more than ten percent of the Company's Common Stock are required to report their ownership of the Company's Common Stock and any changes in that ownership to the SEC. The specific due dates for these reports have been established by the SEC, and the Company is required to report in this Proxy Statement any failure to file by the established dates. To the knowledge of the Company and based solely on a review of the Section 16(a) reports furnished to the Company during 2003, none of the Company's directors, officers and persons holding more than 10% of the Company's Common Stock were delinquent in filing reports pursuant to Section 16(a) of the Exchange Act.

EXECUTIVE COMPENSATION AND OTHER INFORMATION

Summary Compensation Table

The following table sets forth certain information for the three years ended December 31, 2003 concerning compensation paid or accrued by the Company to or on behalf of the Company's Chief Executive Officer during 2003 and each of the two other most highly compensated executive officers of the Company whose compensation during 2003 exceeded \$100,000.

							Long-Te	erm Cor	npensat	ion Awar	ds
Name and		An	nual C	ompens	ation		Securities Underlying		tricted ock	All	l Other
Principal Position	Year	Salary(\$)	Bon	ius(\$)	_0	ther	Options(#)	Awa	rds(\$)	Comp	ensation
William W. Staunton	2003	\$264,687	\$		\$30	,000(1)	100,000	\$		\$22	,991(2)
Chief Executive	2002	250,000			30	,000(1)	100,000			18	,924(2)
Officer	2001	226,563	50,	,000	30	,000(1)	75,000			20	,537(2)
Greg B. Jones	2003	\$222,338	\$		\$		75,000	\$		\$	
President,	2002	210,000					50,000				
Technology Group	2001	193,463					50,000				
LuAnn D. Hanson	2003	\$174,694	\$		\$		75,000	\$		\$	
Chief Financial	2002	165,000					50,000				
Officer and Vice President of Finance	2001	154,791					50,000				

⁽¹⁾ Includes amounts paid for housing and auto allowances.

⁽²⁾ Includes amounts paid for personal travel (\$22,021) and spouse travel (\$970) in 2003; personal travel (\$17,772) and spouse travel (\$1,152) in 2002 and (\$11,940) personal travel, spouse travel (\$3,193), and relocation (\$5,404) in 2001.

Option Grants in 2003

The following table sets forth certain information concerning stock option grants in 2003 to each of the executive officers named in the Summary Compensation Table who received stock option grants in 2003. The exercise price of all options granted below was equal to the reported closing price of the Company's Common Stock on The Nasdaq Stock Market (Nasdaq) on the date of grant.

		Individua	al Grants				
	No. of Securities Underlying Options	% of Total Options Granted to	Exercise	Evniration	Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term ⁽²⁾		
Name	Granted (#)	Employees in 2003 ⁽¹⁾	Price (\$/Share)	Expiration Date	5%(\$)	10%(\$)	
William W. Staunton, III	100,000(3)	11.3%	\$2.32	10/21/13	\$145,904	\$369,748	
Greg B. Jones	75,000(3)	8.5	2.32	10/21/13	109,428	277,311	
LuAnn D. Hanson	75,000(3)	8.5	2.32	10/21/13	109,428	277,311	

- (1) The Company granted options to purchase an aggregate of 887,212 shares to employees in 2003.
- (2) Potential values are net of exercise price and before taxes payable in connection with the exercise of such options or the subsequent sale of shares acquired upon the exercise of such options. These values represent certain assumed rates of appreciation (i.e., 5% and 10% compounded annually over the term of such options) based on the SEC's rules. The actual values, if any, will depend upon, among other factors, the future performance of the Company's Common Stock, overall market conditions and the named officer's continued employment with the Company. Therefore, the potential values reflected in this table may not necessarily be achieved.
- (3) Such options were granted under the 1995 Plan, as amended, and vest and become exercisable in four equal annual installments beginning October 21, 2004.

Aggregated Options Exercised in 2003 and Option Values at December 31, 2003

Number of Securities

The following table sets forth the aggregate number and the value of options held as of the end of 2003 by the executive officers named in the Summary Compensation Table. None of the executive officers named in the Summary Compensation Table exercised options during 2003.

Value of Unexercised

		exercised Options r 31, 2003 (#)	In-the-Money Options at December 31, 2003 (\$)*		
Name	Exercisable	Unexercisable	Exercisable	Unexercisable	
William W. Staunton	262,500	212,500	\$27,750	\$57,750	
Greg B. Jones	333,500	187,500	55,500	41,000	
LuAnn D. Hanson	154,898	168,750	24,202	41,000	

^{*} Represents the difference between the closing price of the Company's Common Stock on December 31, 2003 as reported on Nasdaq (i.e., \$2.62 per share) and the exercise price of such options.

Proxy Statement

Employment Contracts and Termination of Employment and Change-of-Control Agreements

To induce and help assure continuity of management and operations, the Company has entered into Change-of-Control Agreements (the Agreements) with Mr. Staunton, Mr. Jones and Ms. Hanson, which provide for certain severance benefits if the executive's employment is terminated following a "Change-of-Control." The Agreements are effective for a two-year period beginning March 29, 2004.

Under the Agreements with Mr. Staunton, Mr. Jones and Ms. Hanson, in the event of termination of the executive's employment by the Company, other than for "Cause," or by the executive for "Good Reason," the executive will receive: (i) a severance payment equal to 24 months of base salary including targeted bonuses at 100% attainment; (ii) up to 24 months of continued eligibility to participate in medical and health benefit plans on the same use, terms and conditions in effect for the executive prior to his/her termination; and (iii) immediate vesting and ability to exercise all stock options granted to the executive.

A "Change-of-Control" generally includes the occurrence of any of the following: (i) any person becomes the beneficial owner, directly or indirectly, of 50% or more of the voting power of the outstanding securities of the Company; (ii) the approval by the Company's shareholders of a merger of the Company with or into any other corporation of which the Company is not the surviving corporation or in which the Company survives as a subsidiary of another corporation; (iii) a consolidation of the Company with any other corporation; (iv) sale or disposition of all or substantially all of the Company's assets or the adoption of a plan of complete liquidation; or (iv) the current members of the Board of Directors or those Board members nominated by the Company for election to the Board cease for any reason to constitute a majority of the Board.

Compensation Committee Interlocks and Insider Participation

The members of the Company's Compensation Committee during 2003 were William G. Howard, Albert J. Hugo-Martinez and Eric A. Balzer. There were no executive officers or employees of the Company that were members of the Company's Compensation Committee during 2003.

The following Board of Directors Audit Committee Report, Board of Directors Report on Executive Compensation and the Performance Graph on page 19 shall not be deemed incorporated by reference by any general statement incorporating by reference this Proxy Statement into any filing under the Securities Act of 1933 or under the Securities Exchange Act of 1934, except to the extent that the Company specifically incorporates such information by reference, and shall not otherwise be deemed filed under such Acts.

BOARD OF DIRECTORS AUDIT COMMITTEE REPORT

The Audit Committee of the Board of Directors (the Audit Committee) is composed of three directors and operates under a written charter adopted by the Board of Directors. The charter is annually reassessed and updated, as needed, in accordance with applicable rules of the Securities and Exchange Commission and The Nasdaq Stock Market. Each of the members of the Audit Committee is a non-employee director of the corporation and is independent, as defined in the Nasdaq and Securities and Exchange Commission rules.

Management is responsible for the Company's internal controls and financial reporting process. The independent auditors are responsible for performing an independent audit of the Company's financial statements in accordance with auditing standards generally accepted in the United States and issuing a report thereon. The Audit Committee's primary responsibility is to monitor and oversee these processes and recommend to the Board of Directors the selection of the Company's independent auditors. In fulfilling its oversight responsibilities, the Audit Committee reviewed the audited financial statements in the Annual Report with management, including a discussion of the quality, not just the acceptability, of the accounting principles, the reasonableness of significant estimates and judgments, critical accounting policies and the clarity of disclosures in audited the financial statements.

The Audit Committee has reviewed and discussed the Company's audited financial statements as of and for the year ended December 31, 2003 with both the independent auditors and management, including a discussion of the quality, not just the acceptability, of the accounting principles, the reasonableness of significant estimates and judgments, critical accounting policies and the clarity of disclosures in the financial statements. The Audit Committee also discussed with the independent auditors matters required of auditors to be discussed by Statement on Auditing Standards No. 61 (Communication with Audit Committees). The Company's independent auditors also provided to the Audit Committee the written disclosures required by Independence Standards Board Standard No. 1 (Independence Discussions with Audit Committees), and the Audit Committee discussed with the independent auditors their independence.

Based on the foregoing, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2003 for filing with the Securities and Exchange Commission.

Eric A. Balzer Albert J. Hugo-Martinez William G. Howard

BOARD OF DIRECTORS REPORT ON EXECUTIVE COMPENSATION

In 2003, the Board of Directors was responsible for determining and approving the annual compensation to be paid and the benefits to be provided to the Company's executive officers and for administering the Company's Amended and Restated 1986 Stock Option Plan, the 1989 Non-statutory Stock Option Plan, the 1995 Stock Option Plan, as amended, and the 1999 Stock Option Plan. The Company's compensation program is designed to attract, retain and motivate qualified executive officers that the Company believes will contribute to its long-term success. The Company's compensation program is comprised primarily of annual base salaries and stock option grants. In addition, executive officers participate in the Company's group life insurance and health benefit plans that are offered to all full-time employees. The Board considers each component of compensation within the context of the entire officer compensation program in making its determination.

The Compensation Committee of the Board of Directors makes recommendations to the Board of Directors regarding salaries, bonuses, stock option grants and other compensation and benefits for directors, officers and employees.

Annual Base Salaries. The Board of Directors reviews and approves the annual base salaries of all executive officers, including the Chief Executive Officer. In determining annual base salaries, the Board collects and analyzes base salary information from competitors in its industry and uses that information as the basis for comparing the base salaries of the Company's executive officers to the amounts paid to executive officers with comparable qualifications, experience and responsibilities in businesses similar to the Company's business. The Board also considers both subjective and objective factors, including, among others, an officer's responsibilities, experience and qualifications, job performance, contributions and length of service to the Company, and the Company's financial results and condition.

Stock Options. Options to purchase the Company's Common Stock have historically been and continue to be a key component of the Company's compensation program. The Board of Directors views the grant of stock options as a valuable incentive that serves to attract, retain and motivate executive officers and other key employees, as well as to align their interest more closely with the Company's goal of enhancing stockholder value. The Compensation Committee reviews and considers recommendations by the Company's Chief Executive Officer (other than for himself) with regard to the grant of stock options to executive officers and other key employees, and then makes recommendations to the Board of Directors. In determining the size, frequency and other terms of an option grant to an executive officer, the Compensation Committee and the Board consider a number of factors, including, among others, such officer's position, responsibilities, job performance, prior option grants, contributions and length of service to the Company and the value of his or her vested and unvested previously granted stock options, if any.



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Options generally vest in annual installments over four years as long as the optionee remains an employee of the Company and, therefore, encourages an optionee to remain in the employ of the Company. In 2003, options to purchase an aggregate of 250,000 shares of Common Stock were granted to all executive officers as a group and represented approximately 28.2% of all options granted to the Company's employees in 2003. Information concerning options granted during 2003 to executive officers is provided in the table entitled "Option Grants in 2003" above.

Compensation of Chief Executive Officer. The Board of Directors generally considers the same factors in determining the Chief Executive Officer's compensation as it considers with respect to the Company's other executive officers, including both subjective and objective factors. Mr. Staunton is the Company's Chief Executive Officer. His compensation in 2003 consisted of an annual salary of \$264,687, housing, auto and travel allowances of \$52,991, and the grant of options to purchase 100,000 shares of the Company's Common Stock. Such stock options vest and become exercisable in four equal annual installments beginning October 21, 2004.

Deductibility of Executive Compensation. Under Section 162(m) of the Internal Revenue Code of 1986, as amended (the Code), a publicly held corporation such as the Company will not be allowed a federal income tax deduction for compensation paid to the executive officers named in the Summary Compensation Table to the extent that compensation (including stock-based compensation) paid to a particular officer exceeds \$1 million in any fiscal year unless such compensation was based on performance goals or paid under a written contract that was in effect on February 17, 1993. Qualifying performance-based compensation (including compensation attributable to the exercise of stock options) will not be subject to the deductibility limitation if certain conditions are met. The Company expects that compensation attributable to the exercise of stock options will qualify for the exception for qualifying performance-based compensation and that such compensation will not, therefore, count toward the \$1 million limit. Based upon the Company's current compensation plans and policies and the regulation under Section 162(m) of the Code, the compensation to be paid to the Company's executive officers for 2003 will not exceed the \$1 million limitation per officer.

William G. Howard Eric A. Balzer Albert J. Hugo-Martinez

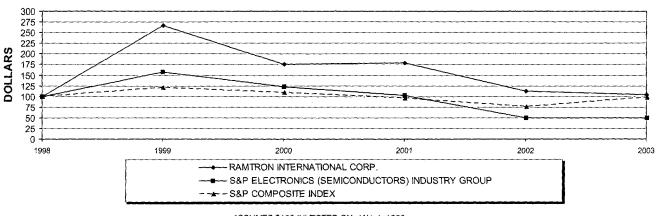
PERFORMANCE GRAPH

The following graph compares the cumulative total return on the Company's Common Stock with the cumulative total return of the S&P Electronics (Semiconductors) Industry Index and the S&P Composite Index for the period commencing December 31, 1998 and ending December 31, 2003.

In preparing the following graph, it was assumed that \$100 was invested on December 31, 1998 in each of the Company's Common Stock, the S&P Electronics (Semiconductors) Index and the S&P 500 Composite Index with all dividends, if any, reinvested.

The historic stock price performance presented in the following chart is not necessarily indicative of future stock performance.

COMPARE CUMULATIVE TOTAL RETURN AMONG RAMTRON INTERNATIONAL CORP., S&P COMPOSITE INDEX AND S&P ELECTRONICS (SEMICONDUCTORS) INDUSTRY INDEX



ASSUMES \$100 INVESTED ON JAN. 1, 1999 ASSUMES DIMDEND REINVESTED FISCAL YEAR ENDING DEC. 31, 2003

	Dec 31, 1998	Dec 31, 1999	Dec 29, 2000	Dec 31, 2001	Dec 31, 2002	Dec 31, 2003
Ramtron	\$100	\$267.50	\$175.00	\$179.60	\$112.00	\$104.80
S&P Electronics (Semiconductors) Industry Index	100	156.88	123.06	103.57	50.52	50.52
S&P Composite Index	100	121.04	110.02	96.95	75.52	97.18

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The following are certain transactions entered into between the Company and its officers, directors and principal stockholders or their affiliates since January 1, 2003.

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Transactions Involving the National Electrical Benefit Fund

Pursuant to a Stock and Warrant Purchase Agreement dated March 13, 1989 between the Company and the Fund, as amended by Amendment No. 1 thereto dated June 29, 1989, the Company agreed to pay to the Fund, for as long as the Fund owns at least 5% of the outstanding shares of the Company's Common Stock, a reasonable monthly consulting fee of not more than \$5,000 and to reimburse the Fund for all out-of-pocket expenses incurred in monitoring the Fund's investment in the Company. The Company made payments totaling \$141,738 to the Fund during 2003 for such fees accumulated during the periods from May 2001 to August 2003.

Transactions Involving Infineon Technologies AG

Infineon Technologies AG (Infineon) is a principal stockholder of the Company. The Company and Infineon entered into a share purchase agreement dated December 14, 2000 pursuant to which Infineon agreed to invest \$30 million in the Company, \$10 million in cash and \$20 million in Infineon common stock (443,488 shares), in exchange for 4,430,005 shares of the Company's common stock. Upon completion of the transaction Infineon owned approximately 20% of the Company's outstanding common stock. The companies also entered into a separate cross-license agreement that provides Infineon with a non-exclusive license to the Company's FRAM memory technology, and the Company with access to certain Infineon technologies relating to fabrication of FRAM memories.

In January 2000, the Company's then wholly owned subsidiary, Enhanced Memory Systems, Inc. (EMS), entered into a non-exclusive, worldwide technology licensing agreement with Infineon. In consideration for the grant of the license to Infineon's process technology, Infineon received 20% of the outstanding common stock of EMS. Additionally, the agreement called for Infineon to provide EMS with up to \$200 million per year of committed wafer manufacturing capacity using Infineon's advanced DRAM and embedded DRAM process capabilities and access to Infineon's design technology. Payments to Infineon for wafers, photomasks and tooling charges related to EMS's committed wafer manufacturing capacity during 2003 was approximately \$1,091,000.

Infineon and EMS have also entered into agreements whereby EMS agreed to design and develop new products for Infineon on a fixed-fee basis. Revenue recognized from these agreements was approximately \$514,000 during 2003.

On March 29, 2002, the Company issued a \$3 million, 5% interest, 5-year debenture to Infineon. The debenture is convertible into the Company's common stock at a fixed conversion price of \$3.769, which is equal to 110% of the five-day volume weighted average price of the Company's common stock prior to the transaction signing. The Infineon debenture is secured by a security interest the Company granted to Infineon in certain of its accounts receivable and patents. In addition, 262,663 common stock warrants are held by Infineon with a modified exercise price of \$3.04 per share and an expiration date of March 28, 2008. Interest paid to Infineon during 2003 was approximately \$150,000.

Executive Officers and Change-of-Control Agreements

The Company's executive officers, William W. Staunton, III, Greg B. Jones, and LuAnn D. Hanson are entitled to certain benefits upon a change-of-control. See "Employment Contracts and Termination of Employment and Change-of-Control Agreements."

PROPOSAL 2 - RATIFICATION OF APPOINTMENT OF INDEPENDENT AUDITORS

INDEPENDENT AUDITORS

The Board of Directors has appointed KPMG LLP (KPMG), independent auditors, to audit the Company's consolidated financial statements for the year ending December 31, 2004. In the event of a negative vote on such ratification, the Board of Directors will reconsider its selection. A representative of KPMG is expected to be present at the Annual Meeting, will have

an opportunity to make a statement if he or she desires to do so and is expected to be available to respond to appropriate questions.

<u>Audit Fees</u>. KPMG's fees billed to the Company during 2003 and 2002 for annual audit services and the review of interim financial statements were \$117,500 and \$21,000, respectively. The Audit Committee approved 100% of such fees in accordance with policies and procedures established by the Audit Committee.

<u>Audit-Related Fees</u>. KPMG's fees billed for audit-related services rendered to the Company during 2003 and 2002 were \$8,500 and \$0, respectively. Audit-related services included fees for the Company's employee benefit plan audit that were not included under the heading "Audit Fees." The Audit Committee approved 100% of such fees in accordance with policies and procedures established by the Audit Committee.

<u>Tax Fees</u>. KPMG's fees billed to the Company during 2003 and 2002 for tax consultation and tax return preparation services were \$16,000 and \$0, respectively. The Audit Committee approved 100% of such fees in accordance with policies and procedures established by the Audit Committee.

<u>Financial Information Systems Design and Implementation Fees</u>. KPMG did not render any professional services to the Company in 2003 or 2002 with respect to financial information systems design and implementation.

The Audit Committee has established a policy whereby the independent auditor is required to seek pre-approval by the Audit Committee of all audit and permitted non-audit services by providing a prior description of the services to be performed and specific estimates for each such services. The Audit Committee approved all of the services performed by KPMG during fiscal 2003.

On July 26, 2002, Ramtron International Corporation replaced Arthur Andersen LLP (Arthur Andersen) as the principal accountant for the Company and its affiliates. The reports of Arthur Andersen for the year ended December 31, 2001 did not contain an adverse opinion or a disclaimer of opinion and was not qualified or modified as to uncertainty, audit scope or accounting principles. The decision to replace Arthur Andersen was approved by the Audit Committee of the Board of Directors of the Company.

On July 26, 2002, the Registrant engaged as its new principal accountant KPMG LLP. During the two most recent fiscal years and through the date of their appointment, the Company has not consulted with KPMG on matters of the type contemplated by Item 304(a)(2) of Regulation S-K.

The Registrant provided Arthur Andersen LLP with a copy of the foregoing disclosures. Arthur Andersen informed the Registrant that it was unable to respond to the Company's filing stating its agreement or disagreement with such statements.

Arthur Andersen's fees billed for professional services rendered to the Company during 2002 were \$54,000, including audit related services of \$47,000 and non-audit related services of \$7,000. Audit related services included fees for employee benefit plan audits and SEC registration statement review. Non-audit related services included fees for tax consultation and tax return preparation.

THE BOARD OF DIRECTORS RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE RATIFICATION OF APPOINTMENT OF THE INDEPENDENT AUDITORS NAMED ABOVE.

OTHER MATTERS

The Company currently knows of no matters to be submitted at the Annual Meeting other than those described herein. If any other matters properly come before the Annual Meeting, it is the intention of the persons named on the enclosed proxy card to vote the shares they represent as the Board of Directors may recommend.

The financial statements, supplementary financial information, and management's discussion and analysis of financial condition and results of operations included in the Company's Annual Report to Stockholders enclosed with this Proxy Statement and in the Company's Annual Report on Form 10-K for the year ended December 31, 2003, as filed with the Securities and Exchange Commission and as subsequently amended, are hereby incorporated by reference herein.

FORM 10-K

COPIES OF THE COMPANY'S ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2003 AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION WILL BE PROVIDED TO STOCKHOLDERS WITHOUT CHARGE UPON WRITTEN REQUEST TO THE CORPORATE SECRETARY, RAMTRON INTERNATIONAL CORPORATION, 1850 RAMTRON DRIVE, COLORADO SPRINGS, COLORADO 80921.

By Order of the Board of Directors

Lulim D. Harson

LuAnn D. Hanson

Secretary

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Colorado Springs, Colorado

April 6, 2004

APPENDIX A

CHARTER OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

1. Audit Committee Purpose

The Audit Committee is appointed by the Board of Directors to assist the Board in fulfilling its oversight responsibilities. The Audit Committee's primary duties and responsibilities are to:

- Monitor the integrity of the Company's financial reporting process and systems of internal controls regarding finance, accounting, and legal compliance.
- Monitor the independence, qualifications and performance of the Company's independent auditors.
- Monitor the performance of the Company's internal audit function.
- Provide an avenue of communication among the independent auditors, management and the Board of Directors.
- Report to the Board of Directors.
- Review areas of potential significant financial risk to the Company.
- Encourage adherence to, and continuous improvement of, the Company's policies, procedures, and practices.
- Ensure that management has the proper review system in place to ensure compliance with legal and regulatory requirements.
- Perform an annual assessment and performance evaluation of the effectiveness of the audit committee.
- Prepare an audit committee report to be included in the annual proxy statement.

2. Audit Committee Composition and Meetings

- Audit Committee members shall meet the requirements of The Nasdaq Stock Exchange. The Audit Committee shall be comprised of three or more directors as determined by the Board, each of whom shall be independent non-executive directors, free from any relationship that would interfere with the exercise of their independent judgment. All members of the Committee shall have a basic understanding of finance and accounting and be able to read and understand fundamental financial statements, and at least one member of the Committee shall have accounting or related financial management expertise.
- Audit Committee members shall be appointed by the Board. If an audit committee chair is not designated or present, the members of the Committee may designate a chair by majority vote of the Committee membership.
- The Audit Committee shall meet at least four (4) times annually, or more frequently as circumstances dictate. The Audit Committee Chair shall prepare and/or approve an agenda in advance of each meeting. The Committee should meet privately in executive session at each meeting or at least annually with management, the independent auditors, and as a committee to discuss any matters that the Committee or each of these groups believe should be discussed. In addition, the Committee, or at least its Chair, should communicate with management and the independent auditors quarterly to review the Company's financial statements and significant findings based upon the auditors limited review procedures.

3. Audit Committee Responsibilities and Duties

Review Procedures

- Review and reassess the adequacy of this Charter at least annually. Submit the charter to the Board of Directors for approval and have the document published at least every three years in accordance with SEC regulations.
- Review the Company's annual audited financial statements prior to filing or distribution. Review should include
 discussion with management and independent auditors of significant issues regarding accounting principles,
 practices, and judgments.
- In consultation with the management and independent auditors, consider the integrity of the Company's financial reporting processes and controls. Discuss significant financial risk exposures and the steps management has taken to monitor, control, and report such exposures. Review significant findings prepared by the independent auditors with management's responses.
- Review with financial management and the independent auditors the Company's quarterly financial results
 prior to the release of earnings and/or the Company's quarterly financial statements prior to filing or distribution. Discuss any significant changes to the Company's accounting principles and any items required to be
 communicated by the independent auditors in accordance with SAS 61 (see below). The Chair of the
 Committee may represent the entire Audit Committee for purposes of this review.

Independent Auditors

- The independent auditors are ultimately accountable to the Audit Committee and the Board of Directors. The
 Audit Committee shall review the independence and performance of the auditors and annually recommend to
 the Board of Directors the appointment of the independent auditors or approve any discharge of auditors when
 circumstances warrant.
- Approve the fees and other significant compensation to be paid to the independent auditors.
- On an annual basis, the Committee should review and discuss with the independent auditors all significant relationships they have with the Company that could impair the auditors' independence.
- Review the independent auditors audit plan discuss scope, staffing, locations, reliance upon management, and general audit approach.
- Prior to releasing the year-end earnings, discuss the results of the audit with the independent auditors. Discuss certain matters required to be communicated to the audit committee in accordance with AICPA SAS 61.
- Consider the independent auditors' judgments about the quality and appropriateness of the Company's accounting principles as applied in its financial reporting.

Legal Compliance

 On at least an annual basis, review with the Company's counsel, any legal matters that could have a significant impact on the organization's financial statements, the Company's compliance with applicable laws and regulations, and inquiries received from regulators or governmental agencies.



- Annually prepare a report to shareholders as required by the Securities and Exchange Commission. The
 report should be included in the Company's annual proxy statement.
- Perform any other activities consistent with this Charter, the Company's by-laws, and governing law, as the Committee or the Board deems necessary or appropriate.
- Maintain minutes of meetings and periodically report to the Board of Directors on significant results of the foregoing activities.
- Establish, review and update periodically a Code of Ethical Conduct and ensure that management has established a system to enforce this Code.
- Ensure procedures are established for the receipt, review, retention and treatment of confidential, anonymous submissions by employees regarding accounting, internal accounting controls and auditing matters.
- Annually review policies and procedures as well as audit results associated with directors' and officers' expense accounts and perquisites. Annually review a summary of directors' and officer's related party transactions and potential conflicts of interest.

Financials

FINANCIAL HIGHLIGHTS

The following selected financial data should be read in conjunction with, and are qualified in their entirety by, the consolidated financial statements and related notes thereto and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included herein.

RAMTRON INTERNATIONAL CORPORATION SELECTED FINANCIAL DATA

for the years ended December 31, 2003, 2002, 2001, 2000 and 1999

(in thousands, except per share data)	2003	2002	2001	2000	1999
Net revenues	\$42,399	\$50,545	\$22,856	\$26,079	\$24,871
Gross margin, product sales(1)	15,832	12,275	3,747	6,263	5,170
Operating loss	(8,177)	(1,300)	(20,970)	(12,925)	(5,825)
Net loss applicable to common shares	(9,505)	(1,923)	(33,151)	(14,497)	(2,035)
Net loss per share - basic and diluted	(0.43)	(0.09)	(1.57)	(0.88)	(0.16)
Working capital	7,197	11,502	9,815(2)	6,943	7,285
Total assets	29,645	40,942	35,819	38,362	29,380
Total long-term debt	3,035	5,728		6,314	5,766
Stockholders' equity	11,042	20,154	19,039	21,501	13,323
Cash dividends per common share ⁽³⁾			***		

⁽¹⁾ Excludes provision for inventory write-off.

⁽²⁾ Excludes deferred licensing and development revenue of \$5.7 million for which the Company has no future cash refund liability.

⁽³⁾ The Company has not declared any cash dividends on its common stock and does not expect to pay any such dividends in the foreseeable future.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis is intended to provide greater details of the results of operations and financial condition of the Company. The following discussion should be read in conjunction with the Company's consolidated financial statements and notes thereto and other financial data included elsewhere herein. Certain statements under this caption constitute "forward-looking statements" within the meaning of Section 21E of the Securities and Exchange Act of 1934, and, as such, are based on current expectations and are subject to certain risks and uncertainties. The reader should not place undue reliance on these forward-looking statements for many reasons including those risks discussed under "Factors that May Affect Future Results" and elsewhere in this document. Forward-looking statements may be identified by the use of forward-looking words or phrases such as "will," "may," "believe," "expect," "intend," "anticipate," "could," "should," "anticipate," "plan," "estimate," and "potential," or other similar words.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, the Company evaluates its estimates, including those related to bad debts, inventories, long-lived assets, income taxes, and contingencies and litigation. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. The Company's significant accounting policies are discussed in Note 1 of the Notes to Consolidated Financial Statements; critical estimates inherent in these accounting policies are discussed in the following paragraphs.

Revenue Recognition. Revenue from product sales to direct customers is recognized upon shipment as the Company generally does not have any post-shipment obligations or allow for any acceptance provisions. The Company defers recognition of sales to distributors when it is unable to make a reasonable estimate of product returns due to insufficient historical product return information. The revenue recorded is dependent upon estimates of expected customer returns and sales discounts.

Revenue from licensing programs is recognized over the period the Company is required to provide services under the terms of the agreement. Revenue from research and development activities that are funded by customers are recognized as the services are performed, generally, as contractual milestones are met. In situations where the Company licenses its technology and also pro-

vides development assistance, the Company records the total proceeds to be received as revenue over the longer licensing period. The revenue recorded by the Company in each reporting period is dependent upon estimates regarding the cost of projects and the achievement of milestones.

Revenue from royalties is recognized upon the shipment of product from the Company's technology license partners to direct customers.

The Company records customer-sponsored research and development revenue on arrangements entered into with customers. The revenue recorded by the Company in each reporting period is dependent upon estimates regarding the cost of projects and the achievement of milestones. Changes in estimates regarding these matters could result in revisions to the amount of revenue recognized on these arrangements.

Allowance for Uncollectible Accounts. While the Company maintains a stringent credit approval process, significant judgments are made by management in assessing our customers' ability to pay at the time of shipment. Despite this assessment, from time to time, our customers are unable to meet their payment obligations. We continue to monitor our customers' credit worthiness and use our judgment in establishing the estimated amounts of customer receivables, which will ultimately not be collected. A significant change in the liquidity or financial position of our customers could have a material adverse impact on the collectibility of our accounts receivable and our future operating results.

Inventory Valuation. The Company writes down its inventory for estimated obsolescence or lack of marketability for the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions. If actual market conditions are less favorable than those projected by management, additional inventory write-downs may be required.

Long-Lived Assets. The Company reviews the carrying values of its long-lived assets whenever events or changes in circumstances indicate that such carrying values may not be recoverable. Under current standards, the assets must be carried at historical cost if the projected cash flows from their use will recover their carrying amounts on an undiscounted basis and without considering interest. However, if projected cash flows are less than their carrying value, the long-lived assets must be reduced to their estimated fair value. Considerable judgment is required to project such cash flows and, if required, estimate the fair value of the impaired longlived asset. The estimated future cash flows are based upon, among other things, assumptions about expected future operating performance and may differ from actual cash flows. During 2003, the Company recorded \$1.7 million of intangible asset impairments related to its EMS subsidiary. These impairments were the result of changing business conditions that decreased the likelihood that certain intangible assets would provide sufficient cash flows to

support the historical cost valuations. The fair values were determined by obtaining an appraisal from an independent consulting firm specializing in such valuations. There can be no assurance that future long-lived asset impairments will not occur.

Goodwill. Goodwill represents the excess of the purchase price over the fair value of identifiable net tangible and intangible assets acquired in a business combination. Goodwill is required to be tested for impairment annually or more frequently if events or changes in circumstances indicate that goodwill may be impaired. The Company performed its annual goodwill impairment testing as of December 31, 2002 and determined that no impairments existed at that date. However, due to changing business conditions in its Mushkin business unit, the Company performed an additional goodwill impairment test as of June 30, 2003 and recorded a \$3.8 million impairment charge (see Note 4 of the Notes to Consolidated Financial Statements). At December 31, 2003, the Company completed its annual analysis of the fair value of its goodwill and determined there was no impairment of its goodwill. This assessment requires estimates of future revenue, operating results and cash flows, as well as estimates of critical valuation inputs such as discount rates, terminal values and similar data. The Company will continue to perform periodic and annual impairment analyses of goodwill resulting from its acquisitions. As a result of such impairment analyses, impairment charges may be recorded and may have a material adverse impact on the financial position and operating results of the Company. Additionally, the Company may make strategic business decisions in future periods that impact the fair value of goodwill, which could result in significant impairment charges. There can be no assurance that future goodwill impairments will not occur.

Deferred Income Taxes. The Company records deferred tax assets and liabilities for the estimated future tax effects of temporary differences between the tax basis of assets and liabilities and amounts recorded in the consolidated financial statements, and for operating loss and tax credit carryforwards. Realization of the recorded deferred tax assets is dependent upon the Company generating sufficient taxable income in the appropriate tax jurisdiction in future years to obtain benefit from the reversal of net deductible temporary differences and from tax credit and operating loss carryforwards. A valuation allowance is provided to the extent that management deems it more likely than not that the net deferred tax assets will not be realized. The amount of deferred tax assets considered realizable is subject to adjustment in future periods if estimates of future taxable income are changed.

RESULTS OF OPERATIONS

Overview

Since its inception, the Company has been primarily engaged in the research and development of ferroelectric technology and the design, development and commercialization of FRAM products and DRAM products. Revenue has been derived from the sale of the Company's FRAM and DRAM products beginning in 1992. The Company has also generated revenue under license and development agreements entered into with a limited number of established semiconductor manufacturers and involving the development of specific applications of the Company's technologies. Accordingly, fluctuations in the Company's revenue have resulted primarily from the timing of significant product orders, the timing of the signing of license and development agreements, and the achievement of related performance milestones.

The Company's total revenue was \$42.4 million, \$50.5 million and \$22.9 million for 2003, 2002 and 2001, respectively.

For 2003, 2002 and 2001, FRAM product sales represented approximately 68%, 55% and 26% of total product sales revenue, respectively; EMS product sales accounted for 2%, 4% and 7%, respectively; while Mushkin product sales represented 30%, 41% and 67% for the same periods. During these periods, product sales revenue accounted for approximately 92%, 80% and 75%, respectively, of total revenue, the remainder of which was generated principally from license and development fees, royalties and customer-sponsored research and development revenue.

FRAM product sales have become the dominate source of revenue for the Company as a result of an expansion of the FRAM customer base, deeper penetration of existing customers, an expanding FRAM product portfolio and our participation in the utility meter replacement program at ENEL, a leading Italian utility company, which is replacing 27,000,000 utility meters in Italy. The ENEL program began in late 2001 and is expected to continue until mid 2005. Ramtron has been generating average quarterly revenue of approximately \$4 million related to this program since the beginning of 2002. We expect this program to continue to generate revenue of approximately \$4 million per quarter until mid 2005. In addition, the Company has been able to significantly increase revenue from other FRAM customers during each of the last three years with non-ENEL product revenue totaling approximately \$10.7 million, \$5.8 million and \$2.4 million in 2003, 2002 and 2001, respectively.

Mushkin revenue for 2003, 2002 and 2001 was approximately \$11.4 million, \$16.3 million and \$11.5 million, respectively. During this period, Mushkin's business transitioned from generating revenue predominately from e-commerce sources to a business with a substantial retail presence by distributing its products through Fry's Electronics. Currently, Fry's sales represent approximately 50% of Mushkin's annual revenue. Also, during the latter part of 2002, Mushkin began to focus on lower volume, higher margin sales opportunities to improve its overall financial performance. This had the effect of reducing revenue but improving net income (exclusive of goodwill impairment charges) in 2003.

Finanda

The Company's costs and expenses were \$50.6 million in 2003, compared with \$51.8 million in 2002 and \$43.8 million in 2001.

Cost of product sales as a percentage of product sales (exclusive of provisions for inventory write-offs) was 59%, 69% and 78% for 2003, 2002 and 2001, respectively. Correspondingly, gross margin rates were 41% for 2003 compared with 31% in 2002 and 22% in 2001. The improvements in gross margin rates have resulted primarily from a change in sales mix. FRAM product sales began to be the dominant source of revenue in 2002, and FRAM product sales generate significantly higher margin rates than Mushkin product sales. In addition, the Company has been able to reduce its cost of FRAM manufacturing through a combination of price reductions from its wafer supplier and subcontract assembly and test suppliers and also through a more economical FRAM cell structure that reduced the size of each unit produced for the ENEL program by approximately 50%, improving margins for its FRAM segment. FRAM product gross margins during 2003 were 51%, compared with 43% in 2002 and 22% in 2001. Mushkin product gross margins during 2003 were 17%, compared with 12% in 2002 and 20% in 2001. Mushkin margin improvements in 2003 as compared to 2002 are primarily the result of improved average selling prices for Mushkin's products.

Research and development expenses, including customer-sponsored research and development, were \$9.4 million in 2003, compared with \$11.8 million in 2002 and \$16.7 million in 2001. The changes in research and development expenses are primarily related to an increased allocation of FRAM engineering resources to manufacturing support activities as product revenue increased and reduced product development expenses at the Company's EMS subsidiary. During 2003, 2002 and 2001, EMS was engaged in product development programs with Cypress Semiconductor Corporation, Hewlett Packard and Infineon, incurring significant expenses for contract design support, photomask and wafer costs to support these programs. In the second quarter of 2003, the Company determined it was uneconomical to continue with the development of EMS' products due to significant future engineering costs required to bring its products to market and uncertainty related to its ability to manufacture products profitably and achieve sufficient market penetration. Additionally, in June 2003, EMS was notified by its primary contract engineering service customers that collaborative product development programs would be discontinued. As a result, the Company will no longer pursue sales or development of EMS' DRAM products.

Sales, general and administrative expenses were \$11.0 million, \$11.8 million and \$12.8 million for 2003, 2002 and 2001, respectively. Decreases in these expenses from 2002 to 2003 are primarily the result of on-going cost reduction activities, which reduced salary, employee benefit and travel expenses. The decrease of \$1.0 million from 2001 to 2002 is primarily attributable to new accounting standards that eliminated the amortization of goodwill beginning January 1, 2002.

Specific charges and impairments reflect costs incurred from strategic actions implemented by the Company to restructure its operations and costs due to asset dispositions and impairments. Such charges totaled \$6.7 million in 2003 and \$12.3 million in 2001. The actions taken during 2003 and 2001 are as follows:

- During the second quarter of 2003, the Company announced its intention to realign operations of its EMS subsidiary, improving operational efficiency and concentrating the Company's resources on its FRAM product business. In April 2003, as part of the realignment, EMS reached an agreement with Hewlett Packard, its principal customer, to release the Company from future development and engineering costs and product delivery requirements. The original terms of the development contract. which included product sales upon the completion of the product development phase of the contract, would have been financially unfavorable to the Company given the contractual selling price of the product relative to present and expected wafer foundry and manufacturing costs. Under its revised agreement with Hewlett Packard, EMS expected to provide contract engineering and design services in support of the joint product development program for an additional six to twelve months. However, in June 2003, Hewlett Packard notified the Company its engineering services would not be required beyond July 31. 2003. EMS also generated revenue from the product development program it entered into with Infineon. In June 2003, Infineon decided not to market the product EMS was developing. As a result of the changes in the Hewlett Packard and Infineon engineering services agreements, the Company will no longer pursue product or service revenue related to EMS' DRAM technology. Specific charges related to these events totaled \$2.9 million for the write-down of excess and obsolete inventory, intellectual property and manufacturing process technology rights.
- A sustained downturn in DRAM market conditions resulted in lower than expected actual and projected revenue and profitability of Mushkin during the first half of 2003. Because the Company believed the downturn was likely to continue to cause lower than expected sales and profitability for some time into the future the Company believed it was appropriate to review the fair value of goodwill related to Mushkin. The result of the Company's review was a charge of \$3.8 million for impairment of goodwill during 2003.
- During 2001, the Company recorded a loss of \$11.4 million on the disposition of 443,488 shares of Infineon common stock owned by the Company, consisting of all the shares obtained through a share purchase agreement with Infineon dated December 14, 2000.
- During 2001, the Company recorded charges totaling \$912,000 for excess and obsolete inventories, of which \$450,000 related to its FRAM products and \$462,000 related to EMS products.

Flarandals

As a result of the Company's limited revenue as compared to its substantial ongoing product research and development and other costs, the Company has incurred losses on a consolidated basis in each fiscal year since its inception and has required substantial capital infusions in the form of debt and equity financing. Net losses for 2003, 2002 and 2001 are \$9.5 million, \$1.8 million and \$33.0 million, respectively.

RESULTS OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2003 AS COMPARED TO 2002

Revenue. Total revenue for 2003 decreased \$8.1 million, or 16% from 2002.

Revenue from product sales decreased \$1.4 million, or 3%, from 2002. FRAM product revenue for 2003 increased \$4.4 million to \$26.6 million, from 2002. Increased FRAM product revenue is primarily attributable to increased shipments to non-ENEL customers. During 2003, approximately 60% of FRAM product revenue was attributable to the ENEL program. The Company expects the ENEL component of its revenue during 2004 will remain a significant portion of total FRAM product revenue. Additionally, the Company recorded revenue of approximately \$950,000 related to a change in our estimate of returns from distributors during 2003. The Company historically recorded all shipments to distributors as deferred revenue until shipped to the end customer because the Company did not believe it had adequate historical data to make a reasonable estimate of the amount of future returns as required under Statement of Financial Accounting Standard No. 48 ("FAS No. 48"), "Revenue Recognition When Right of Return Exists." During the first quarter of 2003, the Company concluded that it had sufficient shipment and return experience to allow for the recognition of revenue on shipments to certain distributors at the time of shipment, along with a reserve for estimated returns. Accordingly, during the first quarter of 2003, the Company recognized an additional \$950,000 in product sales revenue that would have been deferred prior to this change in estimate. The impact on gross margins from this additional revenue was approximately \$450,000 during 2003.

Product revenue at our Mushkin business unit for 2003 was \$11.4 million, a decrease of \$4.9 million, or 30%, as compared to 2002. Decreases in Mushkin product revenue is the result of focusing on lower volume, higher margin sales opportunities to improve its overall financial performance, reducing revenue but improving net income. Additionally, during the first quarter of 2003, Mushkin recognized \$311,000 of revenue related to a change in the estimated amount of distributor product returns as discussed above. The impact on gross margins from this additional revenue was approximately \$40,000 in 2003.

Product revenue at the Company's EMS subsidiary was \$871,000 and \$1.8 million for 2003 and 2002, respectively. As discussed above, during 2003, the Company realigned the operations of its

EMS subsidiary and will no longer pursue product or service revenue related to EMS' DRAM technology.

License and development fees for 2003 were \$498,000, as compared to \$6.8 million for 2002. The decline of \$6.3 million resulted from recognizing the remaining revenue related to the Company's Texas Instruments FRAM license and development agreement during 2002. The Company continues to work with Texas Instruments on a customer-sponsored research and development basis.

The Company recognized royalty revenue of \$480,000 in 2003. In 2002, \$398,000 of royalty revenue was recognized. Such royalty income was primarily attributable to FRAM licensing agreements with existing licensees.

Customer-sponsored research and development revenue during 2003 is primarily attributable to the Company's FRAM technology development program with Texas Instruments and DRAM product development programs with Hewlett Packard and Infineon. The Company recognized customer-sponsored research and development revenue of \$2.5 million and \$3.0 million 2003 and 2002, respectively. The amount of customer-sponsored research and development revenue recognized during a given quarter is dependent on the specific programs the Company is working on, the development stage of each program, the costs incurred during the quarter and the amount of work remaining to complete the program. Customer-funded research and development revenue in future periods is expected to decline as a result of the completion of the Hewlett Packard and Infineon product development programs.

Gross Margins and Cost of Sales (excluding provision for inventory write-down - See "Provision For Inventory Write-down" for additional information). Overall gross margins and cost of product sales as a percentage of product revenue during 2003 were 41% and 59%, respectively. Gross margins associated with the Company's FRAM products increased from 43% in 2002, to approximately 51% in 2003. FRAM gross margins improved as the Company improved manufacturing yields, shipped a more economical version of the product used in the ENEL metering program and realized cost reductions at the Company's subcontract manufacturers. Gross margin as a percentage of product revenue at our Mushkin subsidiary increased to 17% in 2003, as compared to 12% in 2002. Mushkin margin improvements are primarily the result of improved average selling prices for Mushkin's products.

Provision for Inventory Write-Down. During 2003, the Company recorded provisions for excess and obsolete inventory of \$1.6 million compared to \$246,000 during the same period of 2002. The 2003 charge is primarily related to the realignment of the Company's EMS business due to poor market conditions and the high costs of developing EMS' new products. As a result, the Company believes it is unlikely existing inventories at EMS can be

sold. Including these charges, overall gross margins as a percentage of revenue in 2003 were 37% compared to 30% in 2002. During 2003, the expenses recorded for excess and obsolete FRAM inventories, which are not included in cost of product sales is \$278,000. Including these charges, FRAM gross margins as a percentage of revenue in 2003 were 51% compared to 43% in 2002. The Company also recorded \$1,276,000 of inventory write-downs for excess and obsolete EMS inventories in 2003.

Research and Development. Combined research and development expenses for 2003 decreased \$2.4 million to \$9.4 million, a decrease of 20%, as compared with the same period in 2002. This decline is primarily due to decreased costs related to the development of new products at the Company's EMS subsidiary.

Sales, General and Administrative Expenses. Sales, general and administrative expenses for 2003 of \$11.0 million decreased \$747,000, as compared the same period in 2002, primarily due to on-going cost reduction activities, which reduced salary, employee benefits and travel expenses.

Impairment of Goodwill. As previously discussed, a mid-year review of goodwill associated with the Company's Mushkin subsidiary resulted in a charge of \$3.8 million for impairment of goodwill in 2003. In calculating the impairment charge, the fair value was estimated using a discounted cash flow methodology and market comparisons. There can be no assurance that future goodwill impairments will not occur.

Impairment of Intangible Assets. As discussed above, during 2003, the Company realigned its EMS subsidiary and will no longer pursue sales or development of EMS' DRAM products. This caused the Company to review the valuation of EMS' intangible asset portfolio and resulted in the recording of impairment charges of \$1.7 million to adjust the asset carrying values to their estimated fair value at June 30, 2003. The fair values were determined by obtaining an appraisal from an independent consulting firm specializing in such valuations. There can be no assurance that future long-lived asset impairments will not occur.

Interest Expense, Related Party. Related party interest expense increased \$178,000 to \$486,000 for 2003, as compared to 2002, primarily due to increases in interest expense related to the convertible debenture issued to Infineon in March 2002.

Interest Expense, Other. Other interest expense increased \$319,000 to \$879,000 for 2003, primarily due to interest expense related to convertible debentures issued to Halifax Fund, L.P. (Halifax) and Bramwell Capital Corporation (Bramwell) in April 2002 and minimum interest charges related to the Company's credit facility with Wells Fargo Business Credit, Inc. (Wells Fargo).

RESULTS OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2002 AS COMPARED TO 2001

Revenue. Total revenue for 2002 increased \$27.7 million, or 121%, from 2001.

Revenue from product sales increased \$23.1 million, or 134%, from 2001. FRAM product revenue for 2002 increased \$17.7 million to \$22.2 million, from 2001. Increased FRAM product revenue is primarily attributable to increased shipments into the ENEL utility meter program as this program moved to full production in early 2002. During 2002, approximately 74% of FRAM product revenue was attributable to the ENEL program.

Product revenue at our Mushkin business unit for 2002 was \$16.3 million, an increase of \$4.8 million, or 42%, as compared to 2001. Increases in Mushkin product revenue are primarily attributable to progress in penetrating larger accounts through the addition of direct sales staff. This strategy improved revenue but had a negative impact on gross margins and overall profitability.

EMS product revenue for 2002 increased \$614,000, as compared to 2001. Low product sales volume is the result of the Company's 4-megabit product line reaching end-of-life. The Company is no longer manufacturing its 4-megabit product and sold substantially all of its remaining inventories of these products during 2002.

License and development fees for 2002 were \$6.8 million, as compared to \$2.7 million for 2001. This increase is primarily related to a FRAM licensing and technology development program with Texas Instruments, Inc. that began in July 2001.

The Company recognized royalty revenue of \$398,000 in 2002. In 2001, \$295,000 of royalty revenue was recognized. Such royalty income was primarily attributable to FRAM licensing agreements with existing licensees.

Customer-sponsored research and development revenue for 2002 increased \$365,000 to \$3.0 million as compared to the same period in 2001. This increase resulted primarily from EMS' product development programs with Cypress Semiconductor, Hewlett Packard and Infineon. The amount of customer-sponsored research and development revenue recognized during a given period is dependent on the specific programs the Company is working on, the development stage of each program, the costs incurred during the period and the amount of work remaining to complete the program. For 2002, profit related to customer-funded research and development revenue totaled \$927,000 as compared to \$206,000 during 2001. This improvement was primarily attributable to a reduction in the estimated costs to complete our product development contract with Hewlett Packard and may not be representative of profit margins on customer-funded research and development revenue to be recognized in future periods.

Financials

Gross Margins and Cost of Sales (excluding provision for inventory write-down - See "Provision For Inventory Writedown" for additional information). Overall gross margins and cost of product sales as a percentage of product revenue during 2002 were 31% and 69% respectively, compared with overall gross margins of 22% and cost of sales of 78% for 2001. Gross margins associated with the Company's FRAM products improved to 43% from 19% in 2001. FRAM gross margins improved as the Company improved manufacturing yields, shipped a more economical version of the product used in the ENEL metering program and realized cost reductions at the Company's subcontract manufacturers. EMS' gross margins decreased from 51% to 41% in 2002. Gross margins as a percentage of product revenue at our Mushkin subsidiary decreased to 12% in 2002 as compared to 20% in 2001. This decrease was the result of sustained price decreases in the DRAM industry and a focus on high volume, low margin sales opportunities during the first half of 2002.

Provision for Inventory Write-Down. During 2002, the Company recorded provisions for excess and obsolete inventory of \$246,000 compared to \$912,000 during the same period of 2001. Overall gross margins including these charges were 30% in 2002 compared to 16% in 2001. During 2001, the Company recorded expenses of \$450,000 for excess and obsolete FRAM inventories, which are not included in cost of product sales. Including this charge, FRAM gross margins as a percentage of revenue were 43% in 2002 and 9% in 2001. The Company also recorded \$462,000 of inventory write-downs for excess and obsolete EMS inventories. Including this charge, EMS' gross margins as a percentage of revenue in 2001 was 11%.

Research and Development. Combined research and development expenses for the year 2002 decreased \$4.8 million to \$11.8 million, a decrease of 29% as compared with the same period in 2001. This decrease was primarily due to decreased contract design support services, photo mask and wafer costs for the development of EMS DRAM products, and an increased allocation of FRAM engineering resources to manufacturing activities.

Sales, General and Administrative Expenses. Sales, general and administrative expenses for 2002 decreased \$1.0 million to \$11.8 million, a decrease of 8% as compared to the same period in 2001. This decrease was primarily attributable to new accounting standards that eliminated the amortization of goodwill beginning January 1, 2002. During 2002 and 2001, the Company recorded \$0 and \$1.5 million, respectively, of goodwill amortization.

Interest Expense, Related Party. Related party interest expense in 2002 decreased \$874,000, to \$308,000, primarily due to the November 2001 retirement of the Company's credit facility with the National Electrical Benefit Fund. Related party interest expense in 2002 results from interest charges related to a convertible debenture issued to Infineon in March 2002.

Interest Expense, Other. Other interest expense increased \$524,000 in 2002 primarily due to interest expense related to the convertible debentures issued to Halifax and Bramwell on April 1, 2002.

Loss on Disposition of Marketable Equity Securities. During 2001, the Company sold 443,488 shares of Infineon common stock owned by the Company, consisting of all of the shares obtained through the share purchase agreement with Infineon dated December 14, 2000. During 2001, the Company recorded a loss of \$11.4 million on the disposition and impairment of these securities. No such losses occurred in 2002.

LIQUIDITY AND CAPITAL RESOURCES

Since its inception, because revenue generated from operations and licensing has been insufficient to fund operations, the Company has depended on its ability to raise equity capital through private placements of stock and borrowings under debt instruments.

In 1995, the Company entered into a loan facility, bearing interest at 12%, with the National Electrical Benefit Fund (the Fund), an investment fund established for the purpose of providing retirement and related benefits to employees in the electrical contracting and related industries. During 1999, the Company and the Fund agreed to amend the terms of the credit facility extending the maturity date to March 15, 2002, decreasing the interest rate to 8% and requiring the Company maintain certain financial ratios, as defined in the loan document. In July 2001, the note was again amended to extend the maturity date to July 12, 2002. The Company's borrowings under the Fund's credit facility totaled approximately \$7.0 million. On August 22, 2001, the Company exercised the prepayment provision of the note by notifying the Fund of the Company's intention to prepay the balance due no later than January 2, 2002. On November 9, 2001, the Fund elected to accept payment in lieu of a conversion of the debt into the Company's common stock. All principal and accrued interest due, totaling approximately \$7.1 million, was paid to the Fund on November 15, 2001.

The Company raised funds through the private placement of preferred and common stock in 1993, 1997, 1998 and 1999. Also, the Company and Infineon entered into a share purchase agreement dated December 14, 2000 pursuant to which Infineon agreed to acquire 4,430,005 shares of the Company's common stock, the equivalent of 20% of the Company's then outstanding common shares. In exchange for this ownership position, Ramtron received \$10 million in cash and 443,488 shares of Infineon's common stock. All 443,488 Infineon shares were sold by the Company during 2002, generating approximately \$8.6 million in cash.

In March 2002, the Company issued \$8.0 million of 5 year, 5% fixed rate, convertible debentures to Infineon, Halifax, managed by The Palladin Group, L.P. and Bramwell, managed by Cavallo Capital. The debentures are convertible into the Company's com-

mon stock at a fixed conversion price of \$3.77, which is equal to the five-day volume weighted average price (VWAP) of the Company's common stock immediately prior to the transaction signing. The Company can require conversion of the debenture provided the VWAP of the Company's common stock is at least 200% of the conversion price for 20 or more of 30 consecutive trading days. The debenture is secured by a Deed of Trust on the Company's headquarters facility in Colorado Springs, Colorado and certain accounts receivable and patents. In addition, 700,435, 5-year common stock warrants were issued to the investors at an initial exercise price of \$4.28 per share.

The debentures contain covenants, which are customary for this type of financing, including achieving a minimum amount of EBITDA, as defined in the debenture agreements, and not exceeding a defined level of capital expenditures. As of June 30, 2003, the Company failed to meet the minimum EBITDA covenant under the debenture agreements, which by the terms of the debentures became an event of default on July 30, 2003. On August 18, 2003, the Company entered into a Waiver Agreement with the debenture holders. The Waiver Agreement provided for a waiver of the default as well as a waiver of all remaining EBITDA covenants during 2003. In addition, the Waiver Agreement requires that the Company make quarterly principal payments to the debenture holders totaling \$3.8 million over the six quarters from July 2003 to December 2004. Principal payments of \$1.4 million were made in 2003. The remaining four quarterly payments to be paid during 2004 will be between \$600,000 and \$620,000. If the Company fails to make any of the required principal payments, the debenture holders may elect to convert the missed payment amount to common stock at a conversion price equal to 90% of the daily volume weighted moving average for each of the 60 trading days following the notice of failure to pay or require all the amounts then outstanding to be paid. The debenture holders may elect to waive any quarterly redemption right. As of December 31, 2003, the Company was in compliance with, or had obtained waivers of, all covenants of the debentures. The Company believes it will be able to meet the EBITDA covenant requirements from January 1, 2004 through at least December 31, 2004 and, as such, has classified the amounts due after December 31, 2004 as a long-term liability. The Company believes its existing cash resources and future cash flows will be sufficient to meet the quarterly payment schedule through 2004. At December 31, 2003, the outstanding principal on the debentures is \$6.6 million. Future maturities of the debentures are \$2.4 million in 2004 and \$4.2 million in 2007. For 2004, the debenture covenants include (1) EBITDA Earnings of \$937,500 for each six month period ending March 31, June 30, September 30, and December 31, 2004, and (2) EBITDA Earnings for any fiscal guarter in 2004 not to exceed negative \$250,000.

The Company has entered into a credit and security agreement with Wells Fargo to provide a secured \$3 million revolving line of credit. The credit facility currently provides for interest at a floating rate equal to the prime lending rate plus 1.75% per annum and a term of three years. Security for the credit facility includes the

Company's non-European accounts receivable and inventories. The Company plans to use the credit facility for working capital requirements. Borrowing limits are subject to available collateral balances. At December 31, 2003, the borrowing base was \$1.7 million. The Company has yet to borrow any funds under this credit agreement.

Cash and cash equivalents increased by \$2.1 million in 2003 to \$5.3 million. Cash flow provided by operations increased \$9.4 million to \$4.4 million as compared to 2002, when the Company used \$5.0 million to fund operations. Cash generated by operating income, after non-cash charges, which is net loss adjusted by depreciation and amortization, loss on sale of assets, non-cash compensation, provisions for inventory write-offs and impairment charges, was \$298,000 in 2003, compared to \$1.0 million in 2002.

Additionally, working capital requirements decreased approximately \$10.1 million as compared to 2002, primarily due to a decrease of \$2.8 million in accounts receivable and \$4.0 million in inventories. During 2003, the Company collected delinquent payments totaling \$2.4 million from a subcontract manufacturer on the ENEL program. The Company reduced its inventories primarily as a result of the depletion of larger than normal ENEL program inventories at the end of 2002 and the realignment of the Company's EMS business.

Accounts payable and accrued liabilities decreased on a year-over-year basis from \$7.1 million at the end of 2002 to \$6.4 million at the end of 2003. This decrease is primarily attributable to decreased purchases related to reduced activity levels of the Company's EMS subsidiary as compared to the same period in 2002.

Deferred revenue decreased \$538,000 from \$8.0 million at the end of 2002 to \$7.4 million at the end of 2003. This decrease is primarily related to earning previously deferred revenue related to EMS' product development programs offset by additional proceeds received during 2003 related to a FRAM technology license milestone payment from an existing licensee. Deferred revenue related to this milestone will be amortized into revenue over the 8 year remaining life of such technology license.

Cash used in investing activities was \$1.1 million in 2003, compared to \$1.2 million of cash used in investing activities in 2002. In both 2003 and 2002, investing activities were primarily related to the acquisition of capital equipment and intellectual property.

Cash used in financing activities was \$1.3 million in 2003, primarily related to principal payments to the Company's debenture holders as discussed above. During 2002, the Company generated net proceeds of approximately \$7.2 million from the sale of convertible debentures to Infineon, Halifax and Bramwell pursuant to a share purchase agreement dated March 14, 2002. The Company used \$1.2 million to redeem the remaining outstanding convertible preferred stock on July 31, 2002, its maturity date.



Equipment and plant expenditures are expected to be minimal during 2004.

The Company has incurred losses from operations since its inception. The Company's ability to achieve profitable operations is subject to significant risks and uncertainties including, but not limited to, achieving forecasted revenue growth, success in raising additional financing to fund operations, if needed, maintaining gross profit margins and entering into additional foundry, license and research and development arrangements. There is no guarantee that the Company will be successful in addressing such risks.

The Company's current business plan contemplates revenue growth in 2004 due to increasing market penetration of the Company's FRAM products and Mushkin's DRAM module products. Also, the Company's expense levels have decreased as a result of the reduction in EMS' operating activities and other cost reduction activities the Company undertook during 2003. The Company believes that existing cash resources of \$5.3 million as of December 31, 2003, cash generated from increasing product

revenue, reduced operating expenses, and access to up to \$3.0 million from its revolving line of credit with Wells Fargo will be sufficient to fund its operations through at least December 31, 2004.

In view of the Company's expected future working capital requirements in connection with the design, manufacturing and sale of its FRAM and Mushkin DRAM module products, the Company's projected continuing research and development expenditures, other projected operating expenditures and the cost associated with the Company's pending patent litigation, the Company may be required to seek additional equity or debt financing. There is no assurance, however, that the Company will be able to obtain such financing on terms acceptable to the Company, or at all. Any issuance of common or preferred stock to obtain additional funding would result in further dilution of existing stockholders' interests in Ramtron. The inability to obtain additional financing when needed would have a material adverse effect on our business, financial condition and operating results and could adversely affect the Company's ability to continue business operations.

Contractual Commitments. For more information on the Company's contractual obligations on operating leases and contractual commitments, see Notes 5 and 6 of the Notes to Consolidated Financial Statements. At December 31, 2003, the Company's commitments under these obligations were as follows:

(in thousands)	2004	2005	2006	2007	2008	2008
Long-term debt(1)	\$2,845	\$ 328	\$ 238	\$4,212	\$	\$
Capital lease obligations						
Operating leases	72	71	66	52	46	
Purchase obligations(2)	3,352	230	230	230	230	230
Other long-term liabilities						
Total	\$6,269	\$ 629	\$ 534	\$4,494	\$ 276	\$ 230

(1) Includes required principal and interest payments for outstanding debentures held by Infineon, Halifax and Bramwell and minimum interest charges related to the Company's revolving line of credit with Wells Fargo.

(2) The Company's purchase obligations include amounts committed under legally enforceable contracts or purchase orders for goods and services with defined terms as to price, quantity, delivery and termination liability and are primarily the result of purchase orders placed but not yet fulfilled by Fujitsu, the Company's semiconductor wafer supplier.

Legal Matters. The Company is currently involved in a patent interference proceeding (see Note 14 in the 2003 consolidated financial statements). If the Company is ultimately unsuccessful in these proceedings, there would be no retroactive cash payment requirements from the Company to the junior party as a result of such an adverse decision. While the Company cannot accurately estimate the financial effects of such a result, the Company believes that it could, depending on when a final non-appealable judgment is ultimately rendered, materially adversely affect the Company's FRAM product business and operating results and, thus, have a materially adverse effect on the Company's financial condition as a whole.

NEW ACCOUNTING STANDARDS

In January 2003, the Financial Accounting Standards Board (FASB) issued Interpretation No. 46, "Consolidation of Variable Interest Entities" (FIN No. 46). This interpretation clarifies existing accounting principles related to the preparation of consolidated financial statements when the equity investors in an entity do not have the characteristics of a controlling financial interest or when the equity at risk is not sufficient for the entity to finance its activities without additional subordinated financial support from others parties. FIN No. 46 requires a company to evaluate all existing arrangements to identify situations where a company has a "variable interest" (commonly evidenced by a guarantee arrangement

or other commitment to provide financial support) in a "variable interest entity" (commonly a thinly capitalized entity) and further determine when such variable interests require a company to consolidate the variable interest entities' financial statements with its own. The Company is required to perform this assessment by March 31, 2004 and consolidate any variable interest entities for which it will absorb a majority of the entities' expected losses or receive a majority of the expected residual gains. Management does not believe it has any material variable interest entities that it would be required to consolidate.

FORWARD-LOOKING STATEMENTS

The following information should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations," and "Consolidated Financial Statements" and notes thereto included in the Annual Report. This Annual Reportand certain information incorporated herein by reference contain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934. Forward-looking statements in this Annual Report include, without limitation:

- The statements under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations -Critical Accounting Policies" regarding calculation of allowances, reserves, and other estimates that are based on historical experience, the judgment of management, and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources, our beliefs about critical accounting policies, and the significant judgments and estimates used in the preparation of our consolidated financial statements, which statements are subject to risks, including, among others, the inaccuracy of our beliefs regarding actual product failure rates, inventory usage, actual default rates of our customers or other estimates, requiring revisions to the Company's estimated accounts receivable allowances, additional inventory write-downs, warranty and other reserves;
- The statements under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations Results of Operations" regarding the Company's expected (1) revenue from the ENEL metering program and the significance of such revenue to the Company's overall financial performance, revenues and gross margin levels; (2) ability to meet the 2004 EBITDA covenant requirements related to its outstanding debentures; (3) sufficiency of cash resources and future cash flows to meet the 2004 quarterly principal payments on the debentures; (4) level of equipment and plant expenditures during 2004; (5) revenue growth due to increasing market penetration; (6) sufficiency of cash resources to fund the Company's operations through at least December 31, 2004, which statements are subject to various risks and uncertainties, including, but not limited to, general economic conditions and conditions

specific to the semiconductor industry, the demand for Ramtron's products and the products of its principal FRAM customer, order cancellations or reduced bookings, product mix, competitive factors such as pricing pressures on existing products and the timing and market acceptance of new product introductions, Ramtron's ability to secure and maintain an appropriate amount of low-cost foundry production capacity from its sole foundry source in a timely manner, foundry partner's timely ability to successfully manufacture products for Ramtron, foundry partner's ability to supply increased orders for FRAM products in a timely manner using Ramtron's proprietary technology, any disruptions of Ramtron's foundry or test and assembly contractor relationships, the ability to continue effective cost reductions, unexpected design and manufacturing difficulties, and the timely development and introduction of new products and processes;

- The statements under the heading "Quantitative and Qualitative Disclosures About Market Risk" regarding the Company's belief that near-term changes in interest rates, currency exchange rate fluctuations, inflation and other price pressures will not have a material effect on future earnings, fair values or cash flows of the Company, are subject to the risk, among other risks, that we have inaccurately assessed the degree of expected change in interest rates, currency exchange rates, inflation and price pressures:
- The statements in the "Consolidated Financial Statements" and notes thereto included in the Annual Report regarding the Company's belief that (1) the carrying value of cash and cash equivalents, short-term trade receivable, payables and the convertible debentures approximate fair value; (2) the Company has no material variable interest entities it will be required to consolidate; (3) there is no indicated impairment of goodwill; (4) estimated amortization expense for identifiable intangible assets for each of the next five years will be approximately \$550,000 per year; (5) it will be able to meet its debt covenant requirements through at least December 31, 2004; (6) it is more likely than not that deferred tax assets will not be realized, are subject to the risk that we have inaccurately assessed the fair value of our financial instruments, the existence of material variable interest entities, indicated impairment of goodwill, estimated amortization expense in future periods, the ability of the Company to achieve the required EBTIDA covenant requirements and realization of deferred tax assets.

FACTORS THAT MAY AFFECT FUTURE RESULTS

We have a history of losses and there can be no assurance that we will achieve or sustain profitability in the future.

We incurred net losses during 2003 of \$9.5, \$1.9 million in 2002 and \$33.0 million in 2001. As of December 31, 2003, we had an accumulated deficit of \$224.1 million. We have spent substantial amounts of money in developing our FRAM and DRAM products and in our efforts to develop commercial manufacturing capabilities



for those products. We are no longer pursuing any product or services revenue from EMS' products or technology. Our ability to increase revenue or achieve profitability in the future will depend substantially on our ability to increase sales of our products by gaining new customers and increasing our penetration of existing customers, reduce manufacturing costs, significantly increase sales of existing products and successfully introduce and sell new products.

Fluctuations in our historical operating results, in part, have been due to unpredictable product order flows, a limited customer base, manufacturing and other fixed costs. These trends may continue in the future. Factors affecting the demand for our products include, the time required for incorporating our products into customers' product designs, and the ability of our customers' products to gain substantial market acceptance. These factors also make it difficult for us to predict our future revenues. Because we base our operating expenses on anticipated revenue trends, which results in a substantial percentage of our expenses being fixed in the short term, our difficulty in predicting future revenues could affect our ability to achieve future profitability and result in fluctuations in operating results.

Factors that may cause our operating results to vary significantly in the future include:

- our ability to timely develop and qualify for manufacturing new FRAM products, including FRAM products with memory capacities greater than 256-kilobits and FRAM products of all densities that incorporate on-chip analog and mixed signal functions;
- customer acceptance of our products;
- the timing and volume of customer orders;
- our ability to manufacture our products on a cost-effective and timely basis through alliance foundry operations and contract manufacturers and the sensitivity of our production costs to the manufacturing yields achieved by our strategic licensees and contract manufacturers; and
- factors not directly related to us, such as market conditions, competition, pricing pressures, technological developments, product obsolescence, the availability of supplies and raw materials, and changing needs of potential customers in the semiconductor industry in general.

Our products have achieved limited market acceptance, and if our products do not achieve market acceptance, we will be unable to increase our revenues and may never achieve sustained profitability.

Our success depends on the market acceptance of our FRAM and DRAM module products and the time required to achieve market acceptance. If one or more of our products fails to achieve market

acceptance or if market acceptance is delayed, our revenues may not increase and our cash flow and financial condition could be harmed. We must design products that successfully address customer requirements if our products are to be widely accepted by the market. Potential customers will be reluctant to integrate our products into their systems unless our products are reliable, available at competitive prices, and address our customers' current systems requirements. Additionally, potential customers need assurances that their demand for our new products can be met in a timely manner.

Because our customer base for FRAM products is highly concentrated the loss of our primary FRAM customer or any decrease or delay in purchases from this customer could significantly reduce our revenues.

In 2003, 2002 and 2001, approximately 60%, 74% and 47%, respectively, of our FRAM product sales were generated from one customer, ENEL. Because our FRAM customer base is so concentrated, and because FRAM product sales represented more than 68% of our total product sales in 2003, any substantial reduction or cancellation of business from this customer or any significant decrease in the prices of FRAM products sold to them could significantly reduce our revenue, which would also harm our cash flow, operating results and financial condition.

If we do not continually develop new generations of FRAM and DRAM module products that achieve broad market acceptance, we will be unable to compete effectively.

Among other factors, our future success is dependent on our ability to develop, manufacture and market FRAM and DRAM module products that address customer requirements and compete effectively in the market with respect to price, performance and reliability. If we do not compete effectively, we could suffer price reductions, reduced revenue, reduced gross margins and reduced market share. New product development, which includes both our development of new products and the need to "design-in" such new products to customers' systems, is time consuming and costly. This new product development requires a long-term forecast of market trends and customer needs, and often a substantial commitment of capital resources, with no assurance that products will be commercially viable.

In particular, we need to develop new product designs, new process technology and continue ferroelectric materials development. Our current FRAM products are designed at our Colorado Springs facility and manufactured at our partners' manufacturing facilities using 0.5 and 0.35 micron manufacturing processes. To cost effectively design new products with memory capacities greater than 256-kilobits, our strategic licensees manufacturing capabilities need to be 0.35 micron or below to improve yields and reduce the cost of such FRAM products. We believe that our ability to compete in the markets in which we expect to sell our FRAM products will depend, in part, on our ability to produce FRAM products will depend, in part, on our ability to produce FRAM prod-

ucts in smaller feature sizes and also our ability to effectively incorporate analog and mixed signal functions with our memory products. Our inability to successfully produce FRAM products with smaller feature sizes or analog and mixed signal functions would harm our ability to compete and our operating results.

Although the Company has recently developed analog and mixed signal products incorporating our FRAM memory solutions to supplement the Company's traditional memory product offerings, the Company has a limited operating history in these markets and has had limited success. If we fail to introduce new products in a timely manner or are unable to successfully manufacture such products, or if our customers do not successfully introduce new systems or products incorporating ours, or market demand for our new products does not exist as anticipated, our business, financial condition and results of operations could be seriously harmed.

Our ability to increase sales of our DRAM module products depends principally on the timely completion of our development and qualification of new DRAM products that provide price-performance advantages over competing products. Our continued ability to generate revenue from the sale of DRAM products will depend on our successful development, manufacture and marketing of new DRAM module products with improved price-performance characteristics, and we cannot provide any assurance that we will be successful in accomplishing the foregoing.

If we do not keep pace with rapid technological changes and frequent new product introductions, our products may become obsolete, and we may not be competitive.

The semiconductor memory industry is characterized by rapid technological changes and product obsolescence, price erosion and variations in manufacturing yields and efficiencies. To be competitive, we will need to continually improve our products and keep abreast of new technology. Other companies, many of which have greater financial, technological and research and development resources than we do, are researching and developing semiconductor memory technologies and product configurations that could reduce or eliminate any future competitive advantages our products may currently have. We cannot provide any assurance that our ferroelectric technology will not be supplanted in the future by competing technology or that we will have the technical capability and financial resources to be competitive in the semiconductor industry with respect to the continued design, development and manufacture of either FRAM or DRAM module products.

If we fail to protect our intellectual property, or if others use our proprietary technology without authorization, our competitive position may suffer.

Our future success and competitive position depend in part upon our ability to obtain and maintain proprietary technology used in our products. We attempt to protect our intellectual property rights through a combination of patent, trademark, copyright and trade secret laws, as well as licensing agreements and employee and third-party non-disclosure and assignment agreements. We cannot be assured that any of our patent applications will be approved or that any of the patents that we own will not be challenged, invalidated or circumvented by others or be of sufficient scope or strength to provide us with any meaningful protection or commercial advantage.

Policing the unauthorized use of our intellectual property is difficult, and we cannot be certain that the steps we have taken will prevent the misappropriation or unauthorized use of our technologies, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the United States. In addition, we cannot be certain that we will be able to prevent other parties from designing and marketing FRAM-based products or that others will not independently develop or otherwise acquire the same or substantially equivalent technologies as ours.

We may be subject to intellectual property infringement claims that result in costly litigation and could harm our business and ability to compete.

Our industry is characterized by the existence of a large number of patents and frequent claims and related litigation regarding patents and other intellectual property rights. In particular, many leading semiconductor memory companies have extensive patent portfolios with respect to semiconductor memory technology, manufacturing processes and product designs. We may be involved in litigation to enforce our patents or other intellectual property rights, to protect our trade secrets and know-how, to determine the validity of property rights of others, or to defend against claims of invalidity. This type of litigation can be expensive, regardless of whether we win or lose. Also, we cannot be certain that third parties will not make a claim of infringement against us or against our semiconductor company licensees or OEMs in connection with their use of our technology. Any claims, even those without merit, could be time consuming to defend, result in costly litigation and diversion of technical and management personnel, or require us to enter into royalty or licensing agreements. These royalty or licensing agreements, if required, may not be available to us on acceptable terms or at all. A successful claim of infringement against us or one of our semiconductor manufacturing licensees in connection with its use of our technology could harm our business.

We depend on a small number of suppliers for the supply of our products. Problems in their performance can seriously harm our financial results.

The Company currently relies on a single independent foundry to manufacture all of the Company's products. Reliance on this foundry involves several risks, including capacity constraints or delays in timely delivery of the Company's products, reduced control over delivery schedules and the cost of our products, manufacturing yields, quality assurance and the loss of production due to seismic activity, weather conditions and other factors. Although

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the Company continuously evaluates sources of supply and may seek to add additional foundry capacity, there can be no assurance that such additional capacity can be obtained at acceptable prices, if at all. The occurrence of any supply or other problem resulting from these risks could have a material adverse effect on the Company's results of operations. The Company also relies on domestic and offshore subcontractors for die assembly and testing of products, and is subject to risks of disruption in adequate supply of such services and quality problems with such services.

To address our wafer supply concerns, we plan to continue working on expanding our primary foundry capability at Fujitsu and to acquire secondary foundry capability. Even if we enter into a secondary foundry relationship, such manufacturing capacity is not likely to be available for at least 12 to 24 months after reaching an agreement due to significant effort required to develop and qualify for manufacturing a FRAM technology process. Our financial condition and results of operations could be materially adversely affected by the loss of Fujitsu as a supplier or our inability to obtain additional foundry capacity.

We face the risk of losing critical patent rights covering our FRAM products if we do not prevail in our pending patent interference litigation.

A patent interference proceeding, which was declared in 1991 in the United States Patent and Trademark Office between us, National Semiconductor Corporation and the Department of the Navy in regard to one of our issued United States patents, is continuing. The patent involved covers a basic ferroelectric memory cell design invention we believe is fundamentally important to our FRAM business in the United States. For a detailed explanation of such litigation please see "Patent Interference Proceeding."

International sales comprise a significant portion of our product sales, which exposes us to foreign political and economic risks.

For fiscal 2003, 2002 and 2001, international sales comprised approximately 67%, 47% and 23%, respectively, of our net revenue. The increase in export sales as a percentage of total sales is primarily the result of increasing FRAM product sales primarily to Europe, Asia and Japan, in part, because of increased offshore manufacturing activity by U.S. companies. The Company also believes Europe, Asia and Japan are early adopters of new technologies.

We expect that international sales will continue to represent a significant portion of our product sales in the future. As a result of the large foreign component of the Company's revenue, the Company is subject to a number of risks resulting from such operations. Such risks include political and economic instability and changes in diplomatic and trade relationships, foreign currency fluctuations, unexpected changes in regulatory requirements, delays resulting

from difficulty in obtaining export licenses for certain technology, tariffs and other barriers and restrictions, and the burdens of complying with a variety of foreign laws. There can be no assurance that such factors will not adversely impact the Company's results of operations in the future or require the Company to modify its current business practices.

Currently, all our sales and inventory purchases are invoiced and paid in U.S. dollars, reducing our direct exposure to currency fluctuations. Our business, however, is subject to other risks generally associated with doing business with foreign subcontractors including, but not limited to, foreign government regulations and political and financial unrest that may cause disruptions or delays in shipments to our customers or access to our inventories. Our business, financial condition and results of operations may be materially adversely affected by these or other factors related to our international operations.

We have been unable to fulfill all our FRAM customers' orders according to the schedule originally requested due to the constraints in our wafer supply.

Due to the lead time constraints in our wafer supply, from time to time we have been unable to fulfill all our customers' orders according to the schedule originally requested. Although we attempt to maintain an adequate supply of wafers and communicate to our customers delivery dates that we believe that we can reasonably expect to meet, our customers may not accept the alternative delivery date or may cancel their outstanding orders. Reductions in orders received or cancellation of outstanding orders would result in lower revenues and net income, excess inventories and increased inventory reserves.

We must build products based on demand forecasts; if such forecasts are inaccurate, we may incur significant losses.

The Company must order products and build inventory substantially in advance of product shipments, and there is a risk that because demand for the Company's products is volatile and subject to fluctuation, the Company will forecast incorrectly and produce excess or insufficient inventories of particular products. The Company's customers' ability to reschedule or cancel orders without significant penalty could adversely affect the Company's liquidity, as the Company may be unable to adjust its purchases from its independent foundries to match such customer changes and cancellations. The Company has in the past produced excess quantities of certain products, which has had a material adverse effect on the Company's results of operations. There can be no assurance that the Company in the future will not produce excess quantities of any of its products. To the extent the Company produces excess or insufficient inventories of particular products, the Company's results of operations could be adversely affected.

The markets in which we participate are intensely competitive, and if we do not compete successfully, our revenue and ability to achieve profitability would suffer.

The semiconductor industry is intensely competitive and our FRAM and DRAM module products face intense competition from numerous domestic and foreign companies. We may be at a disadvantage in competing with many of our competitors that have significantly greater financial, technical, manufacturing and marketing resources, as well as more diverse product lines that can provide cash flows counter-cyclical to fluctuations in semiconductor memory operations.

Our ability to compete also depends on factors beyond our control, including the rate at which customers incorporate our products into their own products, our customers' success in selling their products, the successful protection of our intellectual property, the success of competitors' products and general market and economic conditions. Our competitors or customers may offer new products based on new technologies, industry standards or end-user or customer requirements, including products that have the potential to replace or provide lower-cost or higher-performance alternatives to our products. The introduction of new products by our competitors or customers could render our existing and future products obsolete or unmarketable.

We compete in various markets with our FRAM strategic licensees and contract manufacturers, which may reduce our product sales.

Our strategic licensees may market products, which compete with our FRAM products. Most of our strategic partners have the right to manufacture and sell FRAM products for their own account with or without the payment of royalties, depending upon the terms of their agreements with us. Because our strategic licensees may manufacture and market FRAM products themselves, they may give the development and manufacture of their own FRAM products a higher priority than the development and manufacture of our products. Any delay in market penetration by our products, or any competition in the marketplace from FRAM products manufactured and marketed by our strategic licensees, could reduce our product sales and harm our operating results.

We depend on a relatively small number of key personnel, and if we are unable to attract additional personnel or retain our key personnel, our business will suffer.

Our future success depends, among other factors, on the continued service of our key technical and management personnel and on our ability to continue to attract and retain qualified employees. We are particularly dependent on the highly skilled design, process, materials and test engineers involved in the development and manufacture of our FRAM products and processes. The competition for these personnel is intense, and the loss of key employees, including executive officers, or our inability to attract additional

qualified personnel in the future, could have both an immediate and a long-term adverse effect on us. There can be no assurance that we can retain them in the future. In addition, none of our employees have entered into post-employment, non-competition agreements with us and, therefore, our employees are not contractually restricted from providing services to our competitors.

Our business is subject to strict environmental regulations and legal uncertainties, which could impose unanticipated requirements on our business in the future and subject us to liabilities.

Federal, state and local regulations impose various environmental controls on the discharge of chemicals and gases used in our strategic licensees' and contract manufacturers' manufacturing processes. Compliance with these regulations can be costly. Increasing public attention has been focused on the environmental impact of semiconductor operations. Any changes in environmental rules and regulations may impose the need for additional investments in capital equipment and the implementation of compliance programs in the future. Any failure by us or our strategic licensees or contract manufacturers to comply with present or future environmental rules and regulations regarding the discharge of hazardous substances could subject us to serious liabilities or cause us to suspend manufacturing operations, which could seriously harm our business, financial condition and results of operations.

Earthquakes, other natural disasters and power shortages or interruptions may damage our business.

Some of our major contract manufacturers' facilities are located near major earthquake faults. If a major earthquake or other natural disaster occurs which damages those facilities or restricts their operations, our business, financial condition and results of operations would be materially adversely affected. Similarly, a major earthquake or other natural disaster near one or more of our major suppliers, like the one that occurred near Fujitsu's manufacturing facility in Iwate, Japan, in May 2003, could disrupt the operations of those suppliers, which could limit the supply of our products and harm our business.

We have limited cash flows, and we may have limited ability to raise additional funds to finance our operations and to meet required principal payments to our debenture holders.

In view of our expected future working capital requirements in connection with the manufacture and sale of our FRAM and DRAM module products, our projected research and development and other operating expenditures, and the requirement to make \$2.4 million of principal payments on our outstanding debentures during 2004, we may be required to seek additional equity or debt financing. We cannot be sure that any additional financing or other sources of capital will be available to us on acceptable terms, or at all. The inability to obtain additional financing when needed would have a material adverse effect on our business, financial condition

and operating results and could adversely affect our ability to continue our business operations. If additional financing is obtained, any issuance of common or preferred stock to obtain funding would result in further dilution of our existing stockholders' interests.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk represents the risk of loss that may impact the financial positions, results of operations or cash flows of the Company due to adverse changes in financial and commodity market prices and rates. The Company is exposed to market risk in the areas of changes in United States interest rates and changes in foreign currency exchange rates as measured against the United States dollar. These exposures are directly related to its normal operating activities. All of the Company's sales are denominated in U.S. dollars, and the Company currently has no derivative financial instruments.

Interest payable on the Company's convertible debentures is fixed at 5% over the term of the debentures. As such, changes in interest rates will not affect future earnings or cash flows.

The Company manages interest rate risk by investing its excess cash in cash equivalents bearing variable interest rates, which are tied to various market indices. The Company does not believe that near-term changes in interest rates will result in a material effect on future earnings, fair values or cash flows of the Company. The net

effect of a 10% change in interest rates on outstanding cash and cash equivalents at December 31, 2003 would have less than an \$100,000 effect on earnings or cash flows.

The Company has a wholly owned subsidiary located in Japan. The operating costs of this subsidiary are denominated in Japanese Yen, thereby creating exposures to exchange rate variations. To date, this subsidiary has had only limited operations and is expected to continue to have limited operations in the foreseeable future; therefore, the Company does not believe any changes in exchange rates will have a material effect on future earnings, fair values or cash flows of the Company. The Company does not believe that reasonably possible near-term variations in exchange rates will result in a material effect on future earnings, fair values or cash flows of the Company; therefore, the Company has chosen not to enter into foreign currency hedging instruments. There can be no assurance that such an approach will be successful, especially in the event of a significant and sudden change in Japanese currency valuation.

Average selling prices of the Company's products have not increased significantly as a result of inflation during the past several years, primarily due to intense competition within the semiconductor industry. The effect of inflation on the Company's costs of production has been minimized through improvements in production efficiencies. The Company anticipates that these factors will continue to minimize the effects of any foreseeable inflation and other price pressures within the industry and markets in which the Company participates.

RAMTRON INTERNATIONAL CORPORATION CONSOLIDATED BALANCE SHEETS

December 31, 2003 and 2002

(in thousands, except share data)	2003	2002
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 5,303	\$ 3,222
Accounts receivable, less allowances of \$272 and \$231, respectively	6,198	8,981
Inventories	4,953	8,952
Other current assets	291	232
Total current assets	16,745	21,387
Property, plant and equipment, net	4,195	4,600
Goodwill and intangible assets, net	8,089	14,150
Other assets	616	805
Total assets	\$29,645	\$40,942
Accrued liabilities Deferred revenue Current portion of long-term promissory notes, net of unamortized discount	1,041 1,395	1,147 2,778
of \$659 and \$0, respectively	1,781	•••
Total current liabilities	9,548	9,885
Deferred revenue	6,020	5,175
Long-term promissory notes net of unamortized discount of \$1,125 and \$2,272, respectively	3,035	5,728
Total liabilities	18,603	20,788
Stockholders' equity:		
Common stock, \$.01 par value, 50,000,000 authorized; 22,191,225 and		
22,123,768 shares issued and outstanding, respectively	222	221
Additional paid-in capital	234,909	234,517
Accumulated deficit	(224,089)	(214,584)
Total stockholders' equity	11,042	20,154
Total liabilities and stockholders' equity	\$29,645	\$40,942

RAMTRON INTERNATIONAL CORPORATION CONSOLIDATED STATEMENTS OF OPERATIONS

For the years ended December 31, 2003, 2002 and 2001

(in thousands, except per share amounts)	2003	2002	2001
Revenue:			
Product sales	\$ 38,910	\$ 40,309	\$ 17,213
License and development fees	498	6,829	2,704
Royalties	480	398	295
Customer-sponsored research and development	2,511	3,009	2,644
	42,399	50,545	22,856
Costs and expenses:			
Cost of product sales	23,078	-28,034	13,466
Provision for inventory write-off	1,554	246	912
Research and development	7,608	9,731	14,216
Customer-sponsored research and development	1,801	2,082	2,438
Sales, general and administrative	11,005	11,752	12,794
Impairment of goodwill	3,843		
Impairment of intangible assets	1,687		
	50,576	51,845	43,826
Operating loss	(8,177)	(1,300)	(20,970)
Interest expense, related party	(486)	(308)	(1,182)
Interest expense, other	(879)	(560)	(36)
Other income, net	37	341	315
Minority interest in net loss of subsidiary			267
Loss on disposition of marketable equity securities			(11,382)
Net loss	\$ (9,505)	\$ (1,827)	\$(32,988)
Loss per common share:			
Net loss	\$ (9,505)	\$ (1,827)	\$(32,988)
Dividends on redeemable preferred stock		(82)	(139)
Accretion of redeemable preferred stock		(14)	(24)
Net loss applicable to common shares	\$ (9,505)	\$ (1,923)	\$(33,151)
Net loss per share:			
Basic and diluted	\$ (0.43)	\$ (0.09)	\$ (1.57)
Weighted average shares outstanding:			
Basic and diluted	22,149	22,088	21,177

See accompanying notes to consolidated financial statements.

RAMTRON INTERNATIONAL CORPORATION CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY For the years ended December 31, 2003, 2002 and 2001

	Common Stock (\$.01) Par Valu	Common Stock (\$.01) Par Value	Doformodo	Additional Daid in	Actological	Accumulated Other	orienchoramo O	Total Stockholdom
(in thousands, except par value amounts)	Shares	Amount	Compensation	Capital	Deficit	Income (Loss)	Income (Loss)	Equity
Balances, December 31, 2000	17,477	\$175	\$(202)	\$201,038	\$(179,510)	l G	; &	\$21,501
Redeemable preferred stock accretion	1	1	1	(24)	1	1		(24)
Redeemable preferred stock dividend	;	l	1	1	(139)	1	ł	(139)
Exercise of options	174	2	1	386	1	1	;	388
Issuance of stock options for services provided	ŀ	1	1 86	123	1	1	•	123
Amortization of stock-based compensation Sale of stock to Infineon	4 430	1 77	707	20 056	1 1	1 1	1 :	30 000
Officer) } }	F 1		20,02	(74)	i 1	1 1	30,000
Unrealized loss on marketable securities	ı	1	I	ı	<u> </u>	(11,382)	(11,382)	(1)
Reclassification adjustment for losses on marketable securities included in net loss	1	ı	ı	1		11.382	11.382	1
Net loss	1	ı	ı	ł	(32,988)	1	(32,988)	(32,988)
Comprehensive loss	1	1	-	ŀ	-		\$ (32,988)	1
Balances, December 31, 2001	22,081	221	1	231,479	(212,661)	1		19,039
Redeemable preferred stock accretion	ŀ	1	1	(14)	- - - -	ı	1	(14)
Redeemable preferred stock dividend	1 9	1	ı	1 5	(82)	1	i	(82)
EXERCISE Of options fscuance of stock ontions for services provided	43	1 1	1 1	38	1 1	1 1	1 1	93 78
Debt discount on issuance of debentures	ı	1	l	2.673	ł	,	1	2.673
Issuance of common stock warrants for services provided	1	1	I	189	ŧ	1	í	189
Other	1	ł	ı	19	(14)	ľ	í	<u>်</u>
Net loss		:		:	(1,827)	1		(1,827)
Balances, December 31, 2002	22,124	221		234,517	(214,584)	1	•	20,154
Exercise of options	29	-	ì	135	1	I	ſ	136
Issuance of stock options for services provided	1	1	1	25	I	ı	{	22
Modification of common stock warrants related to debentures	1	1	I	179	ı	ŀ	ſ	179
Other	1	ŀ	ı	24	;	1	ſ	21
Net loss	1	.	1	1	(9,505)	:	ţ	(6,505)
Balances, December 31, 2003	22,191	\$222	- \$	\$234,909	\$(224,089)	- \$	· · · · · · · · · · · · · · · · · · ·	\$11,042

See accompanying notes to consolidated financial statements.



Financials

RAMTRON INTERNATIONAL CORPORATION CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31, 2003, 2002 and 2001

(in thousands)	2003	2002	2001
Cash flows from operating activities:			
Net loss	\$(9,505)	\$(1,827)	\$(32,988)
Adjustments used to reconcile net loss to net cash provided by (used in)	,	,	, ,
operating activities:			
Depreciation and amortization	1,671	1,837	3,433
Amortization of debt discount	667	401	686
Loss on abandonment of patents	334	263	
Gain on sale of equipment	(10)		
Warrants and stock options issued for services	57	78	123
Stock-based compensation			202
Provision for inventory write-off	1,554	246	912
Minority interest in subsidiary			(267)
Loss on disposition and impairment of marketable equity securities			11,382
Impairment of goodwill	3,843		
Impairment of intangible assets	1,687		
Changes in assets and liabilities:			
Accounts receivable	2,783	(3,757)	(3,514)
Inventories	2,445	(1,723)	(1,197)
Accounts payable and accrued liabilities	(735)	2,169	(1,533)
Deferred revenue	(538)	(2,811)	7,875
Other	151	159	(126)
Net cash provided by (used in) operating activities	4,404	(4,965)	(15,012)
Cash flows from investing activities:			
Purchase of property, plant and equipment	(579)	(706)	(433)
Proceeds from sale of equipment	29		
Payments for intellectual property	(509)	(527)	(558)
Proceeds from sale of investment			8,618
Net cash provided by (used in) investing activities	(1,059)	(1,233)	7,627
Cash flows from financing activities:			
Proceeds from debenture issuance		8,000	
Debenture issue costs		(758)	
Principal payments on debt	(1,400)		(7,000)
Redemption of convertible preferred stock		(1,174)	
Issuance of common stock, net of expenses	136	93	10,388
Net cash provided by (used in) financing activities	(1,264)	6,161	3,388
Net increase (decrease) in cash and cash equivalents	2,081	(37)	(3,997)
Cash and cash equivalents, beginning of year	3,222	3,259	7,256
Cash and cash equivalents, end of year	\$ 5,303	\$ 3,222	\$ 3,259

See accompanying notes to consolidated financial statements.

Finamedals.

RAMTRON INTERNATIONAL CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS December 31, 2003, 2002 and 2001

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

Description of Business. Ramtron International Corporation (the Company) designs, develops, manufactures and markets high-performance specialty semiconductor memory devices. The Company currently has two product lines, ferroelectric nonvolatile random access memory (FRAM) products sold through the Company's Ramtron business unit and high-performance dynamic random access memory (DRAM) products sold through its Mushkin Inc. (Mushkin) subsidiary and historically through its Enhanced Memory Systems, Inc. (EMS) subsidiary. EMS is not expected to generate product revenue in the periods beyond 2003.

The Company's revenue is derived primarily from the sale of its FRAM and DRAM module products and from license and development arrangements entered into with a limited number of established semiconductor manufacturers and involving the development of specific applications of the Company's technologies. Product sales have been made to various customers for use in a variety of applications including utility meters, office equipment, consumer electronics, telecommunications, accelerator boards, disk controllers, personal computers and industrial control devices.

The Company has incurred losses from operations since its inception. The Company's ability to achieve profitable operations is subject to significant risks and uncertainties including, but not limited to, achieving forecasted revenue, the Company's ability to successfully sell its products at prices that are sufficient to cover its operating costs, entering into additional license and research and development arrangements and success in raising additional financing to fund operations as necessary. There is no guarantee that the Company will be successful in addressing such risks.

Use of Estimates. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from those estimates.

Principles of Consolidation. The accompanying financial statements include the consolidation of accounts for the Company's 80% owned subsidiary, EMS and its wholly owned subsidiaries, Mushkin and Ramtron Kabushiki Kaisha (Ramtron K.K.). EMS and Mushkin operate the Company's DRAM businesses targeting high-performance DRAM and SRAM markets and retail and e-commerce market segments, respectively. The Company formed Ramtron K.K. to act in a sales and marketing role within Japan for the Company's products and to function as a liaison between the

Company and its Japanese alliance partners. To date, Ramtron K.K. has had limited operations. All material inter-company accounts and transactions have been eliminated in consolidation.

Minority interest in the net book value and operating results of EMS are reflected in the accompanying consolidated balance sheets and statements of operations. Minority interest in net losses of EMS were not recorded subsequent to March 31, 2001, due to the minority interest balance being reduced to zero on that date.

Cash and Cash Equivalents. The Company considers all cash and highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. There were no investment securities included in cash and cash equivalents at December 31, 2003. \$1.5 million of investment securities were included in cash and cash equivalents as of December 31, 2002. These securities are classified as available-for-sale and are carried at their amortized cost, which approximates fair value.

Inventories. Inventories are stated at the lower of cost or market value. The first-in, first-out method of costing inventories is used. The Company writes down its inventory for estimated obsolescence or lack of marketability for the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions.

Property, Plant and Equipment. Property, plant and equipment are stated at cost and depreciation and amortization are provided using the straight-line method over the estimated useful lives of the respective assets. Maintenance and repairs are expensed as incurred and improvements are capitalized.

The cost of assets sold or retired and the related accumulated depreciation or amortization are removed from the accounts and the resulting gain or loss is reflected in the consolidated statement of operations in the period in which such sale or disposition occurs.

Goodwill. Goodwill represents the excess of the purchase price over the fair value of identifiable net tangible and intangible assets acquired in a business combination. On January 1, 2002, the Company adopted Statement of Financial Standards No. 142, "Goodwill and Other Intangible Assets" (SFAS No. 142) and ceased amortization of its goodwill. Goodwill is required to be tested for impairment annually, or more frequently if events or changes in circumstances indicate that goodwill may be impaired. In accordance with SFAS No. 142, the Company performed its annual goodwill impairment testing as of December 31, 2003, and determined that no impairments existed at that date. For more information on goodwill and the adoption of SFAS No. 142, see Note 4.

Intangible Assets. Intangible assets are recorded at cost and are amortized over their estimated useful lives using the straight-line method. The amounts capitalized for patents include the cost of acquiring and defending the patent.

Impairment of Long-Lived Assets. The Company reviews the carrying values of its long-lived assets whenever events or changes in circumstances indicate that such carrying values may not be recoverable. Under SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" (SFAS No. 144), long-lived assets must be carried at historical cost if the projected cash flows from their use will recover their carrying amounts on an undiscounted basis and without considering interest. However, if projected cash flows are less than their carrying value, the long-lived assets must be reduced to their estimated fair value. Considerable judgment is required to project such cash flows and, if required, estimate the fair value of the impaired long-lived asset. For more information on impairments of long-lived assets and the adoption of SFAS No. 144, see Note 4.

Revenue Recognition. Revenue from product sales to direct customers is recognized upon shipment as the Company generally does not have any post-shipment obligations or allow for any acceptance provisions. The Company defers recognition of sales to distributors when it is unable to make a reasonable estimate of product returns due to insufficient historical product return information.

The Company has historically recorded all shipments to distributors as deferred revenue until shipped to the end customer because the Company did not believe it had adequate historical data to make a reasonable estimate of the amount of future returns as required under SFAS No. 48, "Revenue Recognition When Right of Return Exists." During the first quarter of 2003, the Company concluded that it had sufficient shipment and return experience to allow for the recognition of revenue on shipments to certain distributors at the time of shipment, along with a reserve for estimated returns. Accordingly, during the first quarter of 2003, the Company recognized an additional \$1.3 million in product sales revenue that would have been deferred prior to this change in estimate. The impact on gross margins from this additional revenue was approximately \$490,000 for the year ended December 31, 2003.

Revenue from licensing programs is recognized over the period the Company is required to provide services under the terms of the agreement. Revenue from research and development activities that are funded by customers are recognized as the services are performed, generally, as contractual milestones are met. In situations where the Company licenses its technology and also provides development assistance, the Company records the total proceeds to be received as revenue over the longer licensing period. The revenue recorded by the Company in each reporting period is dependent upon estimates regarding the cost of projects and the achievement of milestones. Changes in estimates regarding these matters could result in revisions to the amount of revenue recognized on these arrangements.

Revenue from royalties is recognized upon the shipment of product from the Company's technology license partners to direct customers.

Income Taxes. The Company recognizes deferred income tax assets and liabilities for the expected future income tax consequences, based on enacted tax laws, of temporary differences between the financial reporting and tax bases of assets, liabilities and carryovers. The Company recognizes deferred tax assets for the expected future effects of all deductible temporary differences, loss carryovers and tax credit carryovers. Deferred tax assets are then reduced, if deemed necessary, by a valuation allowance for the amount of any tax benefits which, more likely than not, based on current circumstances, are not expected to be realized.

Net Loss Per Share. The Company calculates its income (loss) per share pursuant to SFAS No. 128, "Earnings Per Share" (SFAS No. 128). Under SFAS No. 128, basic income (loss) per share is computed by dividing reported income (loss) available to common stockholders by weighted average shares outstanding. Diluted income (loss) per share reflects the potential dilution assuming the issuance of common shares for all dilutive potential common shares outstanding during the period. In periods where the Company records a net loss, all potentially dilutive securities, including warrants and stock options, would be anti-dilutive and thus, are excluded from diluted loss per share.

The following table sets forth the calculation of net loss per common share for the periods ended December 31, 2003, 2002 and 2001:

		December 31,	
(in thousands, except per share amounts)	2003	2002	2001
Net loss applicable to common shares	\$ (9,505)	\$ (1,923)	\$(33,151)
Common shares outstanding: Historical common shares outstanding at beginning of period Weighted average common shares issued during period	22,124 25	22,081 7	17,477 3,700
Weighted average common shares at end of period - basic and diluted	22,149	22,088	21,177
Net loss per share - basic and diluted	\$ (0.43)	\$ (0.09)	\$ (1.57)

For the years ended December 31, 2003, 2002 and 2001, the Company had several equity instruments or obligations that could create future dilution to the Company's common stockholders and which were not classified as outstanding common shares of the Company. The following table details such instruments and obligations and the common stock equivalent for each. The common stock number is based on specific conversion or issuance assumptions pursuant to the corresponding terms of each individual instrument or obligation. These potential stock issuances were excluded from loss per share calculations because their effect was anti-dilutive:

	December 31,			
(in thousands)	2003	2002	2001	
Warrants	2,349	2,374	1,838	
Options	4,545	4,535	3,717	
Convertible preferred stock			216	
Convertible debentures	1,751	2,12		

Stock-Based Compensation. At December 31, 2003, the Company had four stock-based compensation plans, which are more fully described in Note 7. The Company accounts for employee stock-based compensation using the intrinsic value method prescribed by Accounting Principles Board Opinion No. 25 (APB No. 25), "Accounting for Stock Issued to Employees" and related interpretations. All options granted under these plans have an exercise price equal to the market value of the underlying common stock on the date of grant; therefore, no stock-based compensation is reflected in net loss. Had compensation cost for these plans been determined consistent with SFAS No. 123, "Accounting for Stock-Based Compensation" as amended by SFAS No. 148, "Accounting for Stock-Based Compensation - Transition and Disclosure, and Amendment of FASB Statement No. 123," the Company's net loss would have been increased to the following adjusted amounts:

(in thousands, except per share amounts)	Year Ended	Year Ended	Year Ended
	Dec. 31, 2003	Dec. 31, 2002	Dec. 31, 2001
Net Loss Applicable to Common Shares:			
As reported	\$ (9,505)	\$(1,923)	\$(33,151)
Pro forma	(10,885)	(4,181)	(36,235)
Net Loss Per Share:			
As reported - basic and diluted	\$ (0.43)	\$ (0.09)	\$ (1.57)
Pro forma - basic and diluted	(0.49)	(0.19)	(1.71)

For disclosure purposes, the fair value of stock based compensation was computed using the Black-Scholes option pricing model with the following weighted average assumptions used for 2003, 2002 and 2001 grants:

	2003	2002	2001
Risk Free Interest Rate	3.00%	4.00%	4.00%
Expected Dividend Yield	0%	0%	0%
Expected Lives	4.0 years	4.0 years	4.0 years
Expected Volatility	108%	111%	113%

The weighted average fair value of shares granted during the years ended December 31, 2003, 2002 and 2001 was \$1.68, \$2.75, and \$1.67, respectively.

Fair Value of Financial Instruments. The Company's financial instruments consist of cash and cash equivalents, short-term trade receivables and payables. The carrying values of cash and cash equivalents, and short-term trade receivables and payables approximate fair value due to their short-term nature. The carrying amount of the convertible debentures approximates its fair value because the fixed interest rate approximates a current market rate.

Comprehensive Loss. The Company reports all changes in equity that result from transactions and other economic events from non-owner sources as comprehensive loss.

Reclassifications. Certain 2002 and 2001 balances have been reclassified to conform to the current year presentation.

New Accounting Pronouncements. In January 2003, the Financial Accounting Standards Board (FASB) issued Interpretation No. 46, "Consolidation of Variable Interest Entities" (FIN No. 46). This interpretation clarifies existing accounting principles related to the preparation of consolidated financial statements when the equity investors in an entity do not have the characteristics of a controlling financial interest or when the equity at risk is not sufficient for the entity to finance its activities without additional subordinated financial support from others parties. FIN No. 46 requires a company to evaluate all existing arrangements to identify situations where a company has a "variable interest" (commonly evidenced by a guarantee arrangement or other commitment to provide financial support) in a "variable interest entity" (commonly a thinly capitalized entity) and further determine when such variable interests require a company to consolidate the variable interest entities' financial statements with its own. The Company is required to perform this assessment by March 31, 2004 and consolidate any variable interest entities for which it will absorb a majority of the entities' expected losses or receive a majority of the expected residual gains. Management does not believe it has any material variable interest entities that it would be required to consolidate.

2. INVENTORIES:

Inventories consist of:

	December 31,		
(in thousands)	2003	2002	
Finished goods	\$2,269	\$3,783	
Work in process	3,191	5,401	
Obsolescence reserve	(507)	(232)	
	\$4,953	\$8,952	

3. PROPERTY, PLANT AND EQUIPMENT:

Property, plant and equipment consists of:

	Estimated Useful Lives	Decen	nber 31,
(in thousands)	(In Years)	2003	2002
Land		\$ 668	\$ 668
Buildings and improvements	18 and 10	8,942	8,942
Equipment	5	15,057	14,892
Office furniture and equipment	5	620	620
Less accumulated depreciation		25,287	25,122
and amortization		(21,092)	(20,522)
		\$ 4,195	\$ 4,600

Depreciation and amortization expense for property, plant and equipment was \$965,000, \$1,047,000, and \$1,087,000 for 2003, 2002 and 2001, respectively. Maintenance and repairs expense was \$618,000, \$616,000, and \$710,000 for 2003, 2002 and 2001, respectively.

4. GOODWILL AND OTHER INTANGIBLE ASSETS:

Goodwill and other intangible assets consist of:

(in thousands)	December 31, 2003	December 31, 2002
Goodwill	\$10,019	\$13,862
Amortizable intangible assets:	, ,	. ,
Patents	7,160	7,934
Product license fees	2,150	2,150
Process technology		1,983
	19,329	25,929
Accumulated amortization:		
Goodwill	(5,999)	(5,999)
Amortizable intangible assets	(5,241)	(5,780)
Total	\$ 8,089	\$14,150

The changes in the carrying amount of goodwill for the twelve months ended December 31, 2003, by business segment are as follows:

in thousands)	Balance as of January 1, 2003	Goodwill Changes During the Year	Balance as of December 31, 2003
FRAM	\$ 585	\$	\$ 585
Mushkin	7,278	(3,843)	3,435
Total	\$7,863	\$(3,843)	\$4,020

Amortization expense for goodwill was \$0, \$0, and \$1,534,000 for 2003, 2002 and 2001, respectively.

In June 2001, the FASB issued SFAS No. 142. SFAS No. 142 changed the accounting for goodwill and intangible assets and required that goodwill no longer be amortized but be tested for impairment at least annually or more frequently if indicators of potential impairment exist. The provisions of SFAS No. 142 were effective for fiscal years beginning after December 15, 2001, except for provisions related to the non-amortization and amortization of goodwill and intangible assets acquired after June 30, 2001, which were subject immediately to the provisions of SFAS No. 142. The Company adopted SFAS No. 142 and completed its initial impairment review as of January 1, 2002. There was no indicated impairment of the Company's goodwill at the date of adoption or at its first annual review as of December 31, 2002. As a result of the events discussed below, the Company determined it was necessary to perform an analysis of the fair value of its goodwill during the second quarter of 2003. As a result of an analysis completed as of June 30, 2003, the Company recorded goodwill impairment charges totaling \$3,843,000. This charge is reflective of a sustained downturn in DRAM market conditions that the Company expected would continue for some time into the future and had resulted in lower than expected actual and projected revenue and profitability of its Mushkin business unit. In calculating the impairment charge, the fair value was estimated using a discounted cash flow methodology and market comparisons.

The Company completed its annual analysis of the fair value of its goodwill as of December 31, 2003 and determined there is no indicated impairment of its goodwill.

On January 1, 2002, in accordance with SFAS No. 142, the Company ceased amortization of its goodwill which occurred on or before June 30, 2001. The following information is presented as if SFAS No. 142 was adopted as of January 1, 2001. The reconciliation of previously reported loss and loss per share to the amounts adjusted for the exclusion of goodwill amortization net of the related income tax effect is as follows:

	For the years ended December 3					
thousands, except per share amounts)	2003	2002	2001			
Reported net loss applicable to common shares Add: Goodwill amortization	\$(9,505) 	\$(1,923) 	\$(33,151) 1,534			
Adjusted net loss applicable to common shares	\$(9,505)	\$(1,923)	\$(31,617)			
Reported loss per common share - basic and diluted Add: Goodwill amortization	\$ (0.43) 	\$ (0.09) 	\$ (1.57) 0.08			
Adjusted loss per common share - basic and diluted	\$ (0.43)	\$ (0.09)	\$ (1.49)			

In June 2003, EMS was notified by its primary contract engineering service customers that on-going product development programs would be discontinued no later than July 31, 2003. As a result, the Company will no longer pursue sales or development of EMS' DRAM products. However, the Company will pursue the sale or licensing of EMS' intellectual property assets. The EMS intellectual property assets are held as collateral for the Infineon debenture and any sale of these assets will require the prior approval and release by Infineon. As a result of these events, a valuation of EMS' intangible assets was completed and impairment charges of \$1,687,000 were recorded to adjust asset carrying values to their estimated fair value at June 30, 2003. The fair values were determined by obtaining an appraisal from an independent consulting firm specializing in such valuations.

Amortization expense was \$706,000, \$790,000 and \$812,000 in 2003, 2002 and 2001, respectively. Estimated amortization expense for intangible assets is \$550,000 annually in 2004 through 2008 and \$1.3 million thereafter.

5. LONG-TERM DEBT:

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On March 14, 2002, the Company signed an agreement to issue \$8.0 million of 5 year, 5% fixed rate, convertible debentures to Infineon Technologies AG (Infineon), Halifax Fund (Halifax), managed by The Palladin Group, L.P. and Bramwell Capital Corporation (Bramwell), managed by Cavallo Capital. Prior to issuance of the convertible debentures, Infineon owned 4,430,005 shares of Ramtron's outstanding common stock, or 20% of its outstanding shares, and 20% of the outstanding shares of the Company's subsidiary, EMS. On March 29, 2002, the Company issued a \$3 million debenture to Infineon. The Halifax and Bramwell debentures, totaling \$5 million, were issued on April 1, 2002. The debentures are convertible into the Company's common stock at a fixed conversion price of \$3.769 per share, which is equal to 110% of the five-day volume weighted average price (VWAP) of the Company's common stock prior to the transaction signing. The debentures issued to Halifax and Bramwell are secured by a Deed of Trust on the Company's headquarters facility in Colorado Springs, Colorado. The Infineon debenture is secured by a security interest the Company granted to Infineon in certain of its accounts receivable and patents.

In addition, 700,435 shares, 5-year common stock warrants were issued to the investors with an exercise price of \$4.28 per share. The warrants were valued using the Black-Scholes option pricing method with a resulting total value of approximately \$1,773,000. The following assumptions were used to value these warrants: risk free interest rate of 4.93%, expected dividend yield of 0%, expected life of five years, and expected volatility of 113%. This amount is accounted for as a discount to the outstanding debentures and is being amortized over the life of the debentures as a charge to interest expense. The unamortized discount pertaining to the outstanding debentures as of December 31, 2003 and 2002 as a result of the issuance of the warrants is approximately \$1,183,000 and \$1,507,000, respectively.

As a result of the conversion terms of these debentures, a beneficial conversion feature of \$900,000 was created. This beneficial conversion feature was recorded as an increase to additional paid-in-capital and as a debt discount to the outstanding debentures. This discount is being amortized over the life of the debentures as a charge to interest expense. The unamortized discount pertaining to the outstanding debentures as of December 31, 2003 and 2002 as a result of the beneficial conversion feature is approximately \$601,000 and \$765,000, respectively.

The debentures contain covenants, which are customary for this type of financing, including, without limitation, achieving a minimum amount of earnings before interest, taxes, depreciation and amortization (EBITDA), as defined in the debenture agreements, and not exceeding a defined level of capital expenditures. As of June 30, 2003, the Company failed to meet the minimum EBITDA covenant under the debenture agreements, which by the terms of the debentures became an event of default on July 30, 2003 (Default). On August 18, 2003, the Company entered into a Waiver and Amendment to Debenture Agreement (Waiver Agreement) with the debenture holders. The Waiver Agreement provided for a waiver of the Default as well as a waiver of all remaining EBITDA covenants during 2003. In addition, the Waiver Agreement requires that the Company make quarterly principal payments to the debenture holders totaling \$3.8 million from August 2003 through December 2004. The Company paid the first two principal payments of \$800,000 and \$600,000 on August 19, 2003 and December 31, 2003, respectively. The remaining four quarterly payments in 2004 will be between \$600,000 and \$620,000 each. If the Company fails to make any of the required principal payments, the debenture holders may elect to convert the missed payment amount to common stock at a conversion price equal to 90% of the daily volume weighted moving average for each of the 60 trading days following the notice of failure to pay or can require all the amounts then outstanding be paid. The debenture holders may elect to waive any quarterly redemption. In addition, the Waiver Agreement lowered the exercise price of the 700,435 common stock warrants held by the debenture holders from \$4.28 to a price equal to 150% of the average closing bid price for the Company's common stock for the 5-trading days immediately preceding the effective date of the Waiver Agreement (\$3.04 per share) and extended the exercise period for one year. The adjustment to the original terms of the warrants created an additional non-cash increase of approximately \$179,000 to debt discount and additional paid-in capital during 2003. This increase to debt discount is being amortized into interest expense over the remaining life of the debenture. As of December 31, 2003, the Company was in compliance with or has obtained waivers for all covenants of the debentures. The Company believes it will be able to meet its covenant requirements from January 1, 2004 through at least December 31, 2004 and, as such, has classified the amounts due after December 31, 2004 as long-term.

Future maturities of the debentures are \$2.4 million in 2004 and \$4.2 million in 2007.

Interest paid to the debenture holders during 2003 and 2002 was approximately \$385,000 and \$305,000, respectively.

On March 31, 2003, the Company signed an agreement with Wells Fargo Business Credit, Inc. to provide a secured \$3.0 million revolving line of credit. The credit facility provides for interest at a floating rate equal to the prime lending rate plus 1.75% per annum and a term of 3 years. Security for the credit facility includes the Company's non-European accounts receivable and inventories.

The Company has yet to borrow any funds under this credit facility. Minimum interest charges paid to Wells Fargo Business Credit during 2003 was approximately \$107,000. Amounts available under the credit facility were approximately \$1.7 million as of December 31, 2003.

6. COMMITMENTS:

Lease Commitments. The Company has commitments under non-cancelable operating leases expiring through 2008 for various equipment and facilities. Minimum future annual lease payments under these leases as of December 31, 2003 are as follows:

2004	\$ 72,000
2005	71,000
2006	66,000
2007	52,000
2008	46,000
	\$307,000

Total rent expense on all operating leases was \$986,000, \$1,312,000, and \$698,000 for 2003, 2002 and 2001, respectively.

Manufacturing Alliances. The Company has entered into a third-party manufacturing agreement for the supply of its FRAM products. The Company's third-party manufacturing agreement provides only for a call on the manufacturing capacity of the vendor. The product will be supplied to the Company at prices negotiated between the Company and the third-party manufacturer based on current market conditions. The Company does not engage in any take-or-pay agreements with its manufacturing vendors.

7. STOCKHOLDERS' EQUITY:

Preferred Stock. In February 1998, the Company issued and sold in a private placement Series A Convertible Preferred Stock (Preferred Stock). On July 20, 1999, the Company's common stockholders approved the restructuring of the terms of the Company's Preferred Stock. After the restructuring, 872 shares of Preferred Stock remained outstanding.

The restated terms of the remaining Preferred Stock included (i) a fixed conversion at \$5.00 per share; (ii) a three-year term expiring on July 31, 2002; (iii) an adjusted dividend rate of 11% per annum (subject to possible future adjustments); and (iv) a mandatory redemption feature at the date of maturity of \$1,000 per share plus accrued dividends. On July 31, 2002, in accordance with the restated terms of the preferred stock, the Company redeemed 1,160 shares for \$1,174,000.

For the years ended December 31, 2003, 2002 and 2001, the Company recorded \$0, \$82,000 and \$139,000 of dividends, respectively and \$0, \$14,000 and \$24,000 of discount accretion on redeemable preferred stock, respectively.

Financials

Common Stock Placement with Infineon Technologies AG. The Company and Infineon entered into a share purchase agreement dated December 14, 2000 pursuant to which Infineon agreed to acquire 4,430,005 shares of the Company's common stock, the equivalent of 20% of the Company's outstanding common shares. In exchange for this ownership position, Ramtron received \$10 million in cash and 443,488 shares of Infineon's common stock. The companies also entered into a separate cross-license agreement that provides Infineon with a non-exclusive license to the Company's FRAM memory technology, and the Company with access to certain Infineon technologies relating to fabrication of FRAM memories. The initial closing occurred February 2, 2001, providing the Company with \$10 million in cash in exchange for 1,476,668 shares of common stock. The final closing was completed on March 30, 2001, providing the Company 443,488 Infineon shares in exchange for 2,953,337 shares of the Company's common stock. All Infineon shares were sold by the Company during 2001.

Warrants. Warrants to purchase shares of the Company's common stock are as follows:

		Numb				
		(in	(in thousands)			
	Exercise Price Per Share	Principal Stockholders	Others	Total		
Outstanding and exercisable at December 31, 2000	\$ 2.25-\$17.00	3,476	45	3,521		
Cancelled	\$10.81-\$16.22	(1,683)		(1,683)		
Outstanding and exercisable at December 31, 2001	\$ 2.25-\$17.00	1,793	45	1,838		
Cancelled Granted	\$ 5.00 \$ 3.77 -\$ 4.28 ⁽¹⁾	(220) 700	(20) 76	(240) 776		
Outstanding and exercisable at December 31, 2002	\$ 2.25-\$17.00	2,273	101	2,374		
Cancelled Granted	\$ 4.28-\$17.00 ⁽¹⁾ \$ 3.04 ⁽¹⁾	(700) 700	(25) 	(725) 700		
Outstanding and exercisable at December 31, 2003	\$ 2.25-\$ 6.88	2,273	76	2,349		

⁽¹⁾ In March 2002, the Company issued 700,435 warrants to purchasers of \$8 million of convertible debentures offered by the Company at an exercise price of \$4.28 per share. These warrants vested immediately and were valued at \$1,773,000. These warrants were amended pursuant to a debt covenant waiver agreement dated August 18, 2003. The amended warrants have an exercise price of \$3.04 per share and expire in March 2008.

All of the outstanding warrants are currently exercisable. Of such warrants, warrants to purchase 18,000 shares at \$3.77 expire in March 2004; warrants to purchase 58,000 shares at \$4.11 expire in March 2007; warrants to purchase 667,000 shares at \$6.88 expire in December 2007; warrants to purchase 700,000 shares at \$3.04 expire in March 2008; and warrants to purchase 906,000 shares of common stock with an exercise price of \$2.25 expire in 2008 and 2009.

All other outstanding warrants had a nominal value at the time of issuance.

Stock Options. The Company has four stock option plans, the Amended and Restated 1986 Stock Option Plan (the 1986 Plan), the 1989 Non-statutory Stock Option Plan (the 1989 Plan), the 1995 Stock Option Plan, as amended (the 1995 Plan), and the 1999 Stock Option Plan (the 1999 Plan) (collectively, the Plans). The Plans reserve 6,235,714 shares of the Company's common stock for issuance and permit the issuance of non-qualified stock options. The exercise price of all non-qualified stock options must be equal to at least 85% of the fair market value of the common stock on the date of grant in the 1986 and 1989 Plans and 95% in the 1995 and 1999 Plans, and the maximum term of each grant is ten years. Options granted become exercisable in full or in installments pursuant to the terms of each agreement evidencing options granted. The 1986 and the 1995 Plans also permit the issuance of incentive stock options. As of December 31, 2003, the Company has not granted any incentive stock options. The number of options available for future grant on these plans is 862,391.

The Company accounts for these plans under APB Opinion No. 25, under which no compensation cost is recognized for grants with an exercise price equal to or in excess of the value of the underlying stock on the measurement date.

Activity in the Plans is as follows:

		Number of Shares				
)			
	Weighted Average Exercise Price Per Share	Directors and Officers	and			
Outstanding at December 31, 2000	\$10.33	1,520	1,727	3,247		
Granted Cancelled Exercised Reclassification	\$ 2.33 \$14.67 \$ 2.23	413 (158) (18)	764 (375) (174) 18	1,177 (533) (174)		
Outstanding at December 31, 2001	\$ 7.56	1,757	1,960	3,717		
Granted Cancelled Exercised	\$ 3.74 \$ 9.93 \$ 2.19	400 (10)	713 (242) (43)	1,113 (252) (43)		
Outstanding at December 31, 2002	\$ 6.54	2,147	2,388	4,535		
Granted Cancelled Exercised Reclassification	\$ 2.31 \$ 6.49 \$ 2.03	425 (344) (388)	662 (666) (67) 388	1,087 (1,010) (67)		
Outstanding at December 31, 2003	\$ 5.61	1,840	2,705	4,545		

As of December 31, 2003, 2002 and 2001, 2,735,000, 2,406,000, and 1,792,000 of the above options were exercisable, respectively, with weighted average exercise prices of \$7.26, \$8.79, and \$10.90, respectively.

The following table sets forth the exercise price range, number of shares, weighted average exercise price and remaining contractual lives by groups of options:

		Weighte	d Average
Exercise Price Range	Number of Options Outstanding	Exercise Price	Remaining Contractual Life
	(in thousands)		
\$1.47 - \$ 2.19	925	\$ 1.94	7.40
\$2.24 - \$ 2.25	325	2.25	6.00
\$2.30 - \$ 2.32	1,019	2.32	9.80
\$2.36 - \$ 5.47	1,185	4.18	8.31
\$5.50 - \$40.10	1,091	14.34	5.22
	4,545	5.61	7.55

		Weighte	d Average
Exercise Price Range	Number of Options Exercisable	Exercise Price	Remaining Contractual Life
	(in thousands)		
\$1.47 - \$ 2.19	663	\$ 1.97	7.40
\$2.24 - \$ 2.25	325	2.25	6.00
\$2.30 - \$ 2.32	175	2.32	9.80
\$2.36 - \$ 5.47	588	4.41	8.31
\$5.50 - \$40.10	984	15.07	5.22
	2,735	7.26	6.80

8. RELATED PARTY TRANSACTIONS:

Transactions with the Fund. The National Electrical Benefit Fund (the Fund) is a principal stockholder of the Company.

Pursuant to a Stock and Warrant Purchase Agreement dated March 13, 1989 between the Company and the Fund, as amended by Amendment No. 1 thereto dated June 29, 1989 (the 1989 Fund Purchase Agreement), the Company agreed to pay to the Fund, for as long as the Fund owns at least 5% of the outstanding shares of the Company's common stock, a reasonable monthly consulting fee of not more than \$5,000 and to reimburse the Fund for all outof-pocket expenses incurred in monitoring the Fund's investment in the Company. During 2003, 2002 and 2001, the Company was obligated to pay to the Fund approximately \$80,000 per year in payment of such fees and expenses. Payments made for these obligations were \$142,000, \$0 and \$471,000 during 2003, 2002 and 2001, respectively. The \$471,000 payment in 2001 included previously accumulated fees and expenses. \$20,000 and \$100,000 related to this obligation are included in accrued liabilities as of December 31, 2003 and 2002, respectively.

In September 1995, the Company and the Fund entered into a Loan Agreement (the Fund Credit Facility) which was amended on

August 6, 1999. Pursuant to the terms of the amended credit facility (the Amended Credit Facility), the outstanding principal balance under the note was \$7 million. The Amended Credit Facility bore interest at 8% per annum, payable quarterly. The Fund had the right to convert all or any portion of the amounts outstanding under the Amended Credit Facility into common stock at any time or times before maturity of the loan at a conversion price equal to \$5.00 for each share of common stock. The maturity date of the credit facility, as amended, was July 12, 2002. On August 22, 2001, the Company exercised the prepayment provision of the note by notifying the Fund of the Company's intention to prepay the balance due no later than January 2, 2002. The Fund's common stock conversion privileges remained in effect until payment was made. On November 9, 2001, the Fund elected to accept payment in lieu of a conversion to the Company's common stock. On November 15, 2001, the Company paid to the Fund all outstanding principal and interest amounts due, totaling \$7.1 million.

Transactions Involving Infineon Technologies AG. Infineon Technologies AG is a principal stockholder of the Company.

The Company and Infineon entered into a share purchase agreement dated December 14, 2000 pursuant to which Infineon agreed to acquire 4,430,005 shares of the Company's common stock, the equivalent of 20% of the Company's outstanding common shares. In exchange for this ownership position, Ramtron received \$10 million in cash and 443,488 shares of Infineon's common stock. The initial closing occurred February 2, 2001, providing the Company with \$10 million in cash in exchange for 1,476,668 shares of common stock. The final closing was completed on March 30, 2001, providing the Company 443,488 Infineon shares in exchange for 2,953,337 shares of the Company's common stock. All Infineon shares were sold by the Company during 2001. The companies also entered into a separate cross-license agreement that provides Infineon with a nonexclusive license to the Company's FRAM memory technology, and the Company with access to certain Infineon technologies relating to fabrication of FRAM memories.

In January 2000, the Company's then wholly owned subsidiary, EMS, entered into a non-exclusive, worldwide technology licensing agreement with Infineon. In consideration for the grant of the license to Infineon's technology, Infineon received 20% of the outstanding common stock of EMS. Additionally, the agreement called for Infineon to provide EMS with committed wafer manufacturing capacity using Infineon's advanced DRAM and embedded DRAM process capabilities and access to Infineon's design technology. Payments to Infineon for wafers, photomasks and tooling charges related to EMS's committed wafer manufacturing capacity during 2003, 2002 and 2001 were approximately \$1,091,000, \$2,174,000 and \$2,272,000, respectively.

During 2002 and 2003, Infineon and EMS entered into agreements whereby EMS agreed to design and develop new products for Infineon on a fixed-fee basis. Revenue recognized from these agreements was approximately \$514,000 and \$605,000 for 2003 and 2002, respectively.

Hinemaleile

On March 29, 2002, the Company issued a \$3 million, 5% interest, 5-year debenture to Infineon. The debenture is convertible into the Company's common stock at a fixed conversion price of \$3.769 per share, which is equal to 110% of the five-day volume weighted average price (VWAP) of the Company's common stock prior to the transaction signing. The Infineon debenture is secured by a security interest the Company granted to Infineon in certain of its accounts receivable and patents. In addition, 262,663 common stock warrants are held by Infineon with a modified exercise price of \$3.04 per share and an expiration date of March 28, 2008. Interest paid to Infineon during 2003 and 2002 was approximately \$150,000 and \$115,000, respectively.

9. SUPPLEMENTAL CASH FLOW INFORMATION:

Cash paid for interest and income taxes:

(in thousands)	2003	2002	2001
Interest	\$508	\$326	\$533
Income taxes			

10. INCOME TAXES:

As of December 31, 2003, the Company had approximately \$152 million of net operating loss carryovers for tax purposes. Further, the Company has approximately \$1.6 million of research and development tax credits available to offset future federal and state income taxes. The net operating loss and credit carryovers expire through 2023. The Internal Revenue Code contains provisions, which may limit the net operating loss carryforwards available to be used in any given year if certain events occur, including significant changes in ownership interests. The components of deferred income taxes are as follows:

	Decem					
(in thousands)	2003	2002				
Deferred tax assets:						
Capital loss carryovers	\$ 7,300	\$ 7,300				
Deferred revenue	2,800	3,200				
Other	4,770	3,300				
Net operating loss carryovers	60,880	60,900				
	75,750	74,700				
Valuation allowance	(75,750)	(74,700)				
	\$	\$				

Management has determined, based on all available evidence, it is more likely than not that the deferred tax assets will not be realized. Accordingly, the Company has recorded a valuation allowance equal to its net deferred tax assets as of December 31, 2003.

The provision for income taxes includes the following:

	December 31,						
(in thousands)	2	003	2	002	2001		
Current:							
Federal	\$		\$		\$		
State							
Total current							
Deferred:							
Federal	(1,610)		(500)		(11	(000,	
State	((230)		(50)	(1	(000,	
Total deferred benefit	(1,	(1,840)		550)	(12	,600)	
Increase in valuation							
allowance	1,	840	ļ	550	12,	600	
Total provision	\$		\$		\$	-	

Total income tax expense (benefit) differs from the amount computed by applying the statutory federal income (loss) tax rate to income before taxes. The reasons for this difference for the years ended December 31 were as follows:

(in thousands)	2003	2002	2001
Computed tax at federal			
statutory rate	\$(3,327)	\$(639)	\$(11,546)
State income taxes, net	, ,		,
of federal impact	(229)	(91)	(1,649)
Non-deductible expenses	1,716	180	595
Increase in valuation allowance	1,840	550	12,600
Total income tax expense	\$	\$	\$

During 2003, 2002 and 2001, net operating loss carryovers of approximately \$2.4 million, \$5.1 million and \$4.7 million, respectively, expired.

Tax expense other than payroll and income taxes were \$222,000, \$269,000, and \$119,000 for 2003, 2002 and 2001, respectively.

11. LOSS ON DISPOSITION OF MARKETABLE EQUITY SECURITIES:

During 2001, the Company sold 443,488 shares of Infineon common stock the Company held, consisting of all of the shares obtained through the share purchase agreement with Infineon dated December 14, 2000. The Company received proceeds of \$8.6 million from these sales. During 2001, the Company recorded a loss of \$11.4 million on the disposition and impairment of these securities.

12. SEGMENT AND GEOGRAPHIC AREA INFORMATION:

The Company's reportable segments are those that are based on the Company's method of internal reporting, which generally segregates the strategic business units due to differences in products and distribution channels.

The Company's operations are conducted through three business segments. FRAM licenses, manufactures and distributes ferroelectric nonvolatile random access memory products. Mushkin distributes high-speed DRAM module products in the aftermarket through both direct and e-commerce sales channels. Historically, EMS licensed, manufactured and distributed high-speed DRAM products. During 2003, EMS was notified by its primary contract engineering service customers that on-going product development programs would be discontinued no later than July 31, 2003. As a result, the Company will no longer pursue sales or development of EMS' DRAM products.

The accounting policies for determining segment net income (loss) are the same as those used in the consolidated financial statements. There are no internal sales between segments or geographic regions.

(chart on next page)

2001	EMS Mushkin Total		\$ 1,158 \$11,514 \$ 17,213	102 2,704	;	2,644 2,644	3,904 11,514 22,856	(14,274) (12,678) (43,826)	(10,370) (1,164) (20,970)	268	\$ (9,413) \$(10,102) \$(1,164) \$(20,679)	\$ 6,270 \$ 9,820 \$ 35,819	\$ 783 \$ 1,363 \$ 3,433	\$ 27 \$ 13.\$,
	FRAM		\$ 4,541	2,602	295	1	7,438	(16,874)	(9,436)	23	\$ (9,413) \$	\$19,729	\$ 1,287	\$ 393 \$	
	Total		\$40,309	6,829	398	3,009	50,545	(51,576)	(1,031)	271	\$ (1,029)	\$40,942	\$ 1,837	\$ 706	
72	Mushkin	(spu	\$16,313	ł	ł	1	16,313	(16,470)	(157)	t i	\$ (157)	\$ 9,474	\$ 25	\$ 24	•
2002	EMS	(in thousands)	\$ 1,772	1	1	2,431	4,203	(11,376)	(7,173)	265	\$ (6,983)	\$ 7,757	\$ 689	\$ 185	,
	FRAM		\$22,224	6,829	398	578	30,029	(23,730)	6,299	9	\$ 6,111	\$23,711	\$ 1,123	\$ 496	•
	Total		\$38,910	498	480	2,511	42,399	(45,046)	(8,177)	12	\$(8,177)	\$29,645	\$ 1,671	\$ 579	•
)3	Mushkin		\$11,446	ł			11,446	(11,367)	(3,764)	1	\$(3,764)	\$5,856	\$ 14	\$	•
2003	EMS		\$ 871	ŀ	1	1,349	2,220	(7,176)	(6,643)	10	\$(6,633)	\$2,847	\$ 517	\$	•
	FRAM		\$26,593	498	480	1,162	28,733	(26,503)	2,230	2	\$2,232	\$20,972	\$ 1,140	\$ 578	•
				License & development fees		Customer sponsored research and development		Operating costs Impairment charges	Operating income (loss)		Segment income (loss)		Depreciation and amortization		

Segment income (loss) excludes interest income, interest expense and special charges on a total basis of \$(1,340,000), \$(798,000), and \$(12,309,000) in 2003, 2002 and 2001, respectively, not allocated to business segments.

Revenue amounts and percentages for major customers representing more than 10% of total revenue are as follows:

	*	003						2001				
	FRAM DRAM		.M	FRA	M	DRAM		FRAM		DRAM		
						(in thous	ands)					
Customer A Customer B					\$6,508	13%			\$2,667	12%		
Customer C	 \$15,815	 37%							2,567	11%		
Customer D	φ10,010 		\$5,751	- - 14%	16,339	32%	 06 714	400/				
			Ψ0,101	1-770			\$6,714	13%				

The following geographic area data include revenue based on product shipment destination, license and development payor location and customer-sponsored research and development payor location. The data presented for long-lived assets is based on physical location.

Geographic Area Net Revenue:

2003	2002	2001	
\$13,886 3,359	\$26,813 1.791	\$17,651 772	
1,144 1,169	752	291 561	
2,063	1,293	683	
13,132	6,648	629 1,674	
	<u>·</u>	595 \$22,856	
	\$13,886 3,359 1,144 1,169 2,063 5,540	\$13,886 \$26,813 3,359 1,791 1,144 752 1,169 879 2,063 1,293 5,540 10,662 13,132 6,648 2,106 1,707	

Geographic Area Long-lived Assets (Net):

(in thousands)	2003	2002	2001 \$19,276	
United States	\$12,651	\$19,342		
Thailand	222	179	294	
Rest of world	27	34	47	
	\$12,900	\$19,555	\$19,617	

13. DEFINED CONTRIBUTION PLAN:

The Company has a cash or deferred compensation plan (the 401(k) Plan) intended to qualify under Section 401(k) of the Internal Revenue Code of 1986, as amended (the Code), in which substantially all employees are participants. Participants in the 401(k) Plan may make maximum pretax contributions, subject to limitations imposed by the Code, of 100% of their compensation. The Company may make, at the Board of Directors' discretion, an annual contribution on behalf of each participant. No amounts

have been contributed by the Company under the 401(k) Plan on behalf of participating employees.

14. CONTINGENCIES:

Patent Interference Proceeding. A patent interference proceeding, which was declared in 1991 in the United States Patent and Trademark Office (the Patent Office) between the Company, National Semiconductor Corporation (National) and the Department of the Navy in regard to one of the Company's issued United States patents, is continuing. The patent involved covers a basic ferroelectric memory cell design invention the Company believes is of fundamental importance to its FRAM business in the United States. An interference is declared in the Patent Office when two or more parties each claim to have made the same invention. The interference proceeding is therefore conducted to determine which party is entitled to the patent rights covering the invention. In the present interference contest, the Company is the "senior" party, which means that it is in possession of the issued United States Patent and retains all rights associated with such patent. The other two parties involved in the interference are the "junior" parties, and each has the burden of proof of convincing the Patent Office by a preponderance of the evidence that it was the first to invent the subject matter of the invention and thus is entitled to the corresponding patent rights. Only the Company and National filed briefs in this matter. Oral arguments were presented before the Patent Office on March 1, 1996.

The Patent Office decided the interference on May 6, 1997, holding that all of the claims were patentable to National, one of the "junior" parties. The other "junior" party, the Department of the Navy, was not granted any patent claims pursuant to the interference proceedings. On June 20, 1997, the Company filed a Request for Reconsideration with the Patent Office concerning the interference decision. Pursuant to the Request for Reconsideration, the Company requested that five separate issues be reconsidered because, from the Company's perspective, they were either ignored or misconstrued in the original decision. A decision on the Request for Reconsideration was issued on November 19, 1998, again holding that all of the claims were

patentable to National. On January 9, 1999, the Company appealed the decision of the Patent Office on one of the interference counts directly to the Court of Appeals for the Federal Circuit. On February 2, 2000, the Court of Appeals vacated and remanded the decision of the Patent Office for further proceedings. The Company also filed complaints in Federal District Court in the District of Columbia seeking a review of the decision of the Patent Office on the remaining interference counts, which are still pending. The Company remains in possession of the issued United States Patent and retains all rights associated with such patent while it pursues its appeal options. The "junior" party has received no rights associated with this patent decision and will not receive any such rights as long as the appeal process continues. Under a Patent Office decision on August 13, 2001, the Company was found to be the first to invent, however, the Patent Office concluded that the enablement and best-mode requirements for patent issuance had not been met by the Company. In October 2001, both the Company and National filed a Request for Reconsideration with the Patent Office. In November 2002, the Patent Office informed the Company and National that it will not change its August 2001 decision. In December 2002, the Company appealed this decision to the District Court of the District of Columbia.

If the Company's patent rights that are the subject of the interference proceeding are ultimately lost or significantly compromised, the Company would be precluded from producing FRAM products in the United States using the Company's existing design architecture, absent being able to obtain a suitable license to exploit such rights. If such patent rights are ultimately awarded to National, and if a license to such rights is not subsequently entered into by the Company with National, National could use the patent to prevent the manufacture, use or sale by the Company, and/or its licensees, within the United States of any products that come within the scope of such patent rights, which would include all FRAM products as currently designed, and which would materially adversely affect the Company. The Company has vigorously defended its patent rights in this interference contest and will continue such efforts. The Company is uncertain as to the ultimate outcome of the interference proceeding, as well as to the resulting effects upon the Company's financial position or results of operations.

Other Litigation. The Company is involved in other legal matters in the ordinary course of business. Although the outcomes of any such legal actions cannot be predicted, management believes that there is no pending legal proceeding against or involving the Company for which the outcome is likely to have a material adverse effect upon the Company's financial position or results of operations.

15. QUARTERLY DATA (UNAUDITED):

The following unaudited information shows selected items by quarter for the years 2003 and 2002.

	2003			2002				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	(in thousands except per share data)							
Revenue	\$11,011	\$11,689	\$ 7,920	\$11,779	\$12,624	\$12,645	\$13,825	\$11,451
Gross margin, product sales(1)	2,677	4,443	2,641	4,517	2,454	3,306	3,380	2,889
Impairment charges		5,530						
Operating income (loss)	(1,527)	(5,675)	(1,916)	941	(1,112)	(478)	329	(39)
Net income (loss) applicable								
to common shares	(1,805)	(5,972)	(2,295)	567	(1,153)	(761)	139	(148)
Net income (loss) per share:								
- basic	\$ (0.08)	\$ (0.27)	\$ (0.10)	\$ 0.03	\$ (0.05)	\$ (0.03)	\$ 0.01	\$ (0.01)
- diluted	\$ (0.08)	\$ (0.27)	\$ (0.10)	\$ 0.02	\$ (0.05)	\$ (0.03)	\$ 0.01	\$ (0.01)

⁽¹⁾ Includes provision for inventory write-off.

INDEPENDENT AUDITORS' REPORT

The Shareholders and Board of Directors Ramtron International Corporation:

We have audited the accompanying consolidated balance sheets of Ramtron International Corporation (a Delaware corporation) and subsidiaries as of December 31, 2003 and 2002, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2003. In connection with our audits of the 2003 and 2002 consolidated financial statements, we also have audited the financial statement schedules for each of the years in the two-year period ended December 31, 2003 as listed in the accompanying index. These consolidated financial statements and financial statement schedules are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement schedule of Ramtron International Corporation and subsidiaries for the year ended December 31, 2001 were audited by other auditors who have ceased operations. Those auditors expressed an unqualified opinion on those consolidated financial statements and financial statement schedule, before the revision described in note 4 to the consolidated financial statements, in their report dated March 18, 2002.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Ramtron International Corporation and subsidiaries as of December 31, 2003 and 2002, and the results of their operations and their cash flows for each of the years in the two-year period ended December 31, 2003, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the related 2003 and 2002 financial statement schedules, when considered in relation to the basic consolidated financial statements taken as a whole present fairly, in all material respects, the information set forth therein.

As discussed in note 4 to the consolidated financial statements, Ramtron International Corporation and subsidiaries adopted the provisions of Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets," effective January 1, 2002.

As discussed above, the consolidated statements of operations, stockholders' equity, and cash flows of Ramtron International Corporation for the year ended December 31, 2001 were audited by other auditors who have ceased operations. As described in note 4, the consolidated financial statements for the year ended December 31, 2001 have been revised to include the transitional disclosures required by Statement of Financial Accounting Standards No. 142, Goodwill and Other Intangible Assets, which was adopted by the Company as of January 1, 2002. In our opinion, the disclosures for 2001 in note 4 are appropriate. However, we were not engaged to audit, review, or apply any procedures to the 2001 financial statements of Ramtron International Corporation other than with respect to such disclosures and, accordingly, we do not express an opinion or any other form of assurance on the 2001 financial statements taken as a whole.

KPMG LLP

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Denver, Colorado February 6, 2004

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To Ramtron International Corporation:

We have audited the accompanying consolidated balance sheets of Ramtron International Corporation (a Delaware corporation) and subsidiaries as of December 31, 2001 and 2000, and the related consolidated statements of operations, cash flows and stockholders' equity for each of the three years in the period ended December 31, 2001. These financial statements and the schedule referred to below are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Ramtron International Corporation and subsidiaries as of December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States.

Our audits were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The schedule listed in the index of financial statements is presented for purposes of complying with the Securities and Exchange Commission's rules and is not part of the basic financial statements. This schedule has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, fairly states in all material respects the financial data required to be set forth therein in relation to the basic financial statements taken as a whole.

As explained in Note 1 to the financial statements, effective January 1, 2000, the Company changed its method of accounting for recognizing revenue on technology licensing activities.

Arthur Andersen LLP Denver, Colorado, March 18, 2002.

The report of Arthur Andersen-LLP (Andersen) is a copy of a report previously issued by Andersen on March 18, 2002. The report has not been reissued by Andersen nor has Andersen consented to its inclusion in this Annual Report on Form 10-K. The Andersen report refers to the consolidated balance sheet as of December 31, 2000, and the consolidated statements of operations, cash flows and stockholders' equity for the year ended December 31, 1999 which are no longer included in the accompanying financial statements.

Corporate Information

Corporate Offices

1850 Ramtron Drive Colorado Springs, CO 80921

Tel: 719-481-7000 Fax: 719-481-9294

State of Incorporation

Delaware

Annual Meeting

Hilton Garden Inn 1810 Briargate Parkway Colorado Springs, CO 80920 Thursday, June 3, 2004 at 10:30 a.m.

Ramtron Securities

The Company's common stock trades on the Nasdaq National Market tier of The Nasdaq Stock Market under the symbol "RMTR."

Dividends

The Company has not paid any dividends since its inception and does not intend to pay any cash dividends in the foreseeable future. The Company intends to retain any earnings to finance its operations.

Communication with the Board of Directors

Confidential written correspondence to Ramtron's Board of Directors should be sent to the following address:

Board of Directors Ramtron International Corporation Attn: Chairman of the Board 1850 Ramtron Drive Colorado Springs, CO 80921

Shareholder Assistance

For information regarding lost stock certificates or changes of address, please write to the Company's transfer agent:

Citibank, N.A 111 Wall Street 20th Floor, Zone 7 New York, NY 10005

For additional copies of this report, 10-K or 10-Q, or other financial information, Ramtron stockholders or other interested investors can contact:

Ramtron International Corporation 1850 Ramtron Drive Colorado Springs, CO 80921 719-481-7000

For other information or questions, please contact:

Investors Relations
Ramtron International Corporation
1850 Ramtron Drive Drive
Colorado Springs, CO 80921
719-481-7213

Ramtron on the Internet

For information about Ramtron and its products, please visit us at the following web addresses:

www.ramtron.com www.mushkin.com email: info@ramtron.com

Duplicate Mailings

If you receive more than one Annual Report and Proxy Statement and wish to help us reduce costs by discontinuing multiple mailings to your address, contact:

Citibank Shareholders Services P.O. Box 43077 Providence, RI 02940-3077 877-248-4237

Electronic Proxy Materials

Ramtron's proxy materials can now be received electronically. This option will save the Company the cost of printing and mailing these materials to you. It will also make them accessible to you immediately as soon as they are available.

If you are a street holder (you own stock through a bank or broker), please contact your broker and ask for electronic delivery of Ramtron's proxy materials.

Directors and Officers

Albert J. Hugo-Martinez, Chairman of the Board
William G. Howard, Director
Eric A. Balzer, Director
Klaus Fleischmann, Director
Doris Keitel-Schulz, Director
William W. Staunton, III, Director and CEO
Greg B. Jones, Director and President-Technology Group
LuAnn D. Hanson, CFO and Vice President of Finance



www.ramtron.com

Ramtron International Corporation

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